REGIONAL ASSESSMENT OF THE SALINE-SEEP PROBLEM AND A WATER-QUALITY INVENTORY OF THE MONTANA PLAINS

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REGIONAL ASSESSMENT OF THE SALINE-SEEP PROBLEM AND A WATER-QUALITY INVENTORY OF THE MONTANA PLAINS

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with a section on

ALGAL POPULATIONS IN SEEP-AFFECTED WATERS, WITH AN EMPHASIS ON SALINITY INDICATORS AND POTENTIALLY TOXIC SPECIES

by
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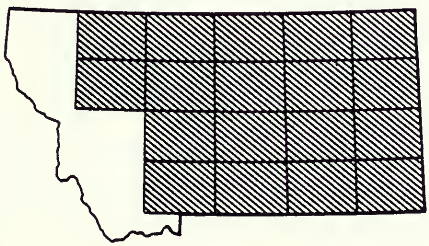

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MONTANA COLLEGE OF MINERAL SCIENCE AND TECHNOLOGY
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ABSTRACT

The regional water-quality inventory of the Montana Plains suggests that significant water-quality deterioration has occurred in the glaciated portion of Montana where dryland farming has been practiced for many years. Several non-glaciated areas where saline seep is spreading repidly are Judith Basin, Fergus, and Stillwater counties--also in areas of dryland farming.

The regional survey of wells, springs, streams, and reservoirs was conducted over a 42-county area encompassing roughly 118,000 square miles. More than 2,800 sites were evaluated in the field and 452 water samples were collected, of which 247 were analysed for trace elements. Specific conductance of the water ranged from 1,000 and 10,000 micromhos per centimeter at 64 percent of the sites. Conductivities were considerably higher in wells penetrating Cretaceous marine aquifers than in the non-marine late Cretaceous and Tertiary aquifers. Significant concentrations of trace elements, particularly selenium and boron, were found in many of the ground-water samples. Of the 160 samples analysed for selenium, more than 30 percent had concentrations greater than 10 micrograms per liter; some had values as high as 1,800 micrograms per liter.

The aerial reconnaissance survey indicated that the previous estimate of 200,000 acres of saline seep in Montana is somewhat low. The survey showed that there were considerably more affected acres in northern and central Montana than formerly thought, and, conversely, that southern and eastern Montana contained fewer seep acres.

A survey of 100 algal specimens collected from selected stream and reservoirs revealed that 25 percent of the water samples contained potentially toxic blue-green algae that could be responsible for some of the reported livestock kills.

INTRODUCTION

The widespread occurrence and rapid growth of saline seep on or adjacent to cultivated drylands has become one of the most serious conservation problems in the Great Plains Region (7). Dryland salinity, hardly recognized 30 years ago, has now taken roughly two million acres out of production in the plains region--Montana, North and South Dakota, Alberta, Saskatchewan, and Manitoba (13).

Since 1969, the Montana Bureau of Mines and Geology in cooperation with numerous local, state, and federal organizations has been investigating the saline-seep problem. The Bureau has emphasized and examined the hydrological, geological, and water quality aspects of the problem (1, 9). In 1974, available analyses of water collected near Fort Benton and Sidney, Montana; Mott, North Dakota; and Lethbridge, Alberta, strongly suggested that in addition to losing thousands of acres of valuable farmland to saline seeps, mineralized water was rapidly contaminating nearby reservoirs, streams, and shallow aquifers. In some cases, the water was more saline than sea water (approximately 35,000 parts per million total dissolved solids) and was unfit for domestic, livestock, and irrigation use. Reported livestock and wildlife kills in certain areas were possibly related to salinity problems.

The portion of Montana affected by saline seep is characterized by relatively thin aquifers of alluvial or glacial origin underlain by thick, virtually impervious shale formations. These shallow aquifers provide water for towns, domestic use, livestock, and are the source of numerous springs, streams, and ponds. Because ground water represents a valuable resource in this part of Montana and economic alternatives to this water supply generally do not exist, the need for a regional assessment of the saline-seep problem and related water-quality investigation became apparent. As a result, the Montana Bureau of Mines and Geology, in cooperation with the Water Quality Bureau, requested funds from the Old West Regional Commission to conduct the investigation.

METHOD OF STUDY

Because saline-seep affects domestic water supplies and because additional field personnel and analytical laboratory were available, a substantial portion of the program was subcontracted to the Water Quality Bureau, Montana Department

of Health and Environmental Sciences, Helena. The 42-county study area encompassing about 118,000 square miles (75 million acres) was divided into two general work areas with the Montana Bureau of Mines and Geology investigating northern and central Montana and the Water Quality Bureau covering the southern and eastern portion of the state.

Field information collected at each site included location, date evaluated, owner (if known), water source (stream, well, pond, etc.), water flow rate, brief site description, specific conductance, temperature, and remarks. In addition, the static water level, total depth, land surface altitude, and aquifer were also noted for wells and land surface altitude and aquifer were noted for springs. If a sample was to be sent to the lab, 4 containers of water were commonly collected--1 liter raw, 1 liter filtered (.45μ), 250 ml filtered-acidified (HNO_3), and 250 ml filtered and preserved (HgCl). Biological specimens were collected in accordance with instructions outlined by Loren Bahls. Areas with extensive saline-seep development (primarily cultivated areas) were given maximum sampling effort, consequently, very few sites were evaluated in the mountains or foothills located within the study area.

The samples were analyzed by Bureau of Mines and Geology, Butte, and Water Quality Bureau, Helena, utilizing procedures adopted by the Environmental Protection Agency and the U.S. Geological Survey. Most of the samples were analyzed for major constituents (calcium, magnesium, sodium, potassium, iron, manganese, silica, carbonate, bicarbonate, chloride, sulfate, and fluoride); nutrients (nitrate, phosphate); and selected trace elements (strontium, lithium, lead, copper, zinc, nickel, and aluminum). Many of the ground-water samples were also analyzed for arsenic, boron, mercury, antimony, beryllium, cadmium, chromium, silver, selenium, and tin. Measurements for pH and lab specific conductance and calculations for dissolved solids, total hardness, alkalinity, and sodium absorption ratio were made for each sample. All chemical and pertinent field data was computerized foe entry into state and federal data systems.

PROJECT OBJECTIVES

At the outset of the investigation two specific tasks or objectives were envisioned: (1) collecting and analyzing numerous surface- and ground-water samples; and (2) conducting a general water-quality survey utilizing historical data and comparing it to the new field data. As the program progressed during the first year several problems arose, and the following modifications and changes were implemented:

a) The large historical ground-water database (roughly 3,000 analyses on file at the State Board of Health) collected and analyzed from 1920 to 1970 was virtually unusable because the sample-site locations were not required or requested during this period. This reduced the usable historical data file to less than 600 analyses, few of which were located in seep-affected areas. As a result, emphasis was shifted to implement an extensive, region-wide specific conductance inventory to establish current baseline salinity levels. In all, over 2,800 wells, streams, springs, and reservoirs, and ponds, were evaluated in the field (Table 1); substantially increasing travel and personnel costs. These costs were offset by supplemental funds from the Department of State Lands saline-seep program, and by reducing the number of complete chemical analyses (Task 1).

b) Because of the absence of an extensive historical database, emphasis was placed on trying to establish and document water quality trends on existing saline-seep research sites (Fig. 2) where relatively rapid changes in water quality could be anticipated and evaluated. Specific conductance as well as water-level measurements were taken periodically (3 to 8 times per year) from each test hole and additional water quality samples were collected from selected research wells. Supplemental funds for analyses and site monitoring were obtained from the Bureau of Mines and Geology and Department of State Lands.

c) To reduce travel time of field crews and to accurately delineate significant seep-affected areas, an aerial reconnaissance survey was conducted. Seep areas were outlined on photo-index sheets (when available) and on county highway maps; they were later transferred to base maps. The aerial reconnaissance allowed field crews to concentrate on critical areas and provided the first uniformly documented distribution of saline areas in Montana.

d) Review of the chemical data obtained from selected ground-water samples collected during the first year revealed the presence of several trace elements—notably selenium, boron, tin, and aluminum--in concentrations greatly exceeding recommended limits. As a result, the suite of trace metals was expanded, increasing analytical costs significantly. Additional funds were obtained from the Bureau of Mines and Geology and Department of State Lands to offset the increased analytical costs.

e) Preliminary evaluation of several ponds indicated that in addition to the high concentrations and array of dissolved constituents and nutrients that are known to be present, there may be blue-green algae that are lethal to livestock. To investigate the potential toxic species of algae, a small subcontract was given to Dr. Loren Bahls who examined and described the benthic algae at approximately 100 different sites in the project area.

With the implementation of these changes the overall project objectives were increased from two to five:

1. To compare saline-seep formation at selected research sites with varying agronomic, geologic, and climatic conditions.

2. To assess regional extent of saline areas from aerial reconnaissance.

3. To document algal species present in selected streams and reservoirs.

4. To collect and analyze numerous water samples (Task 1 - reduced somewhat).

5. To conduct a regional water-quality (specific conductance) survey (Task 2 - greatly expanded).

COMPARISON OF SALINE-SEEP FORMATION IN GREAT PLAINS REGION

Because several papers that discuss the cause, formation, and development of saline seep in the northern Great Plains have appeared elsewhere in the literature (1, 6, 8, 9, 10, 11, 12), only a brief summary of saline-seep formation will be included in this report.

Saline seeps--defined as recently developed saline soils in non-irrigated areas that are wet some or all of the time, often with white salt crusts and

where crops or grass production are reduced or eliminated--are caused by land-use changes that allow an increased amount of moisture to migrate beneath the root zone, thereby disrupting the natural plant-soil-moisture regime. The major land-use change throughout the Great Plains Region is the alternate crop-fallow (summer fallow) farming system. Other factors that help aggravate the occurrence and spread of saline seep are:

(1) Soil, subsoil, and underlying geologic formations that contain a nearly inexhaustible supply of water-soluble salts.

(2) A climate in which a large percentage of annual precipitation occurs during the spring (April, May, and early June) before crops can utilize stored moisture effectively and before evapotranspiration is significant.

(3) Numerous poorly drained upland "potholes" (typical of glaciated terranes) that are routinely cultivated. Once the shallow clay pan at the base of the pothole has been disturbed, water readily enters the underlying substratum.

(4) A virtually impermeable material (shale or clay) beneath the soil profile that effectively impedes the downward movement of water, thus forming a "perched" or near-surface body of water. Such a condition retards or prevents drainage.

(5) Development of a local ground-water flow system that allows saline ground water to migrate from upland recharge areas toward nearby discharge (saline seep) areas.

The generalized process of saline-seep formation is shown in Figure 1. The process starts by movement of water beneath the root zone but above the shallow impermeable layers, thereby forming a local ground-water flow system. The flow system moves saline water downslope to the discharge area (seep), where it evaporates, depositing the salt on the surface.

The rocks underlying the northern and eastern parts of Montana are mostly shale, siltstone, and sandstone with some widespread deposits of glacial till. The shale and till contain relatively large amounts of soluble salts that can be readily dissolved and transported by soil moisture and ground water. The salts can remain in solution underground or can be precipitated by evaporation where the water approaches or reaches the land surface. As long as a natural

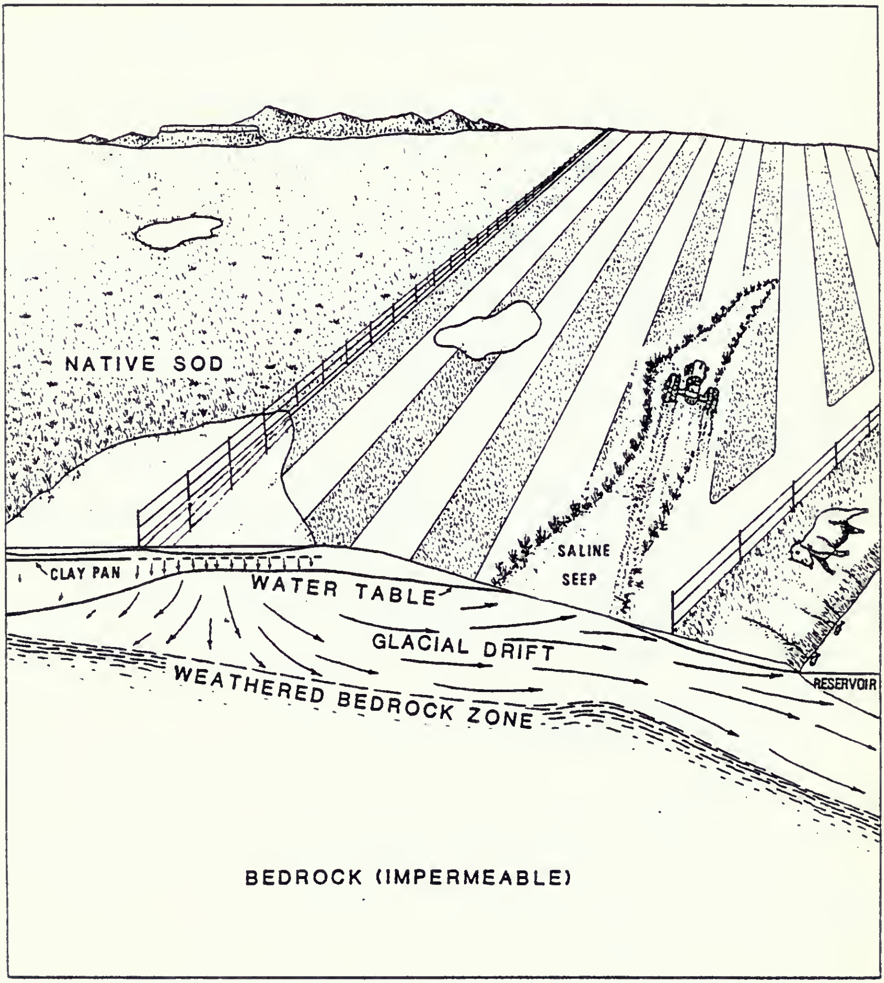


Figure 1. Generalized diagram illustrating the formation of saline seep

hydrologic system remains in equilibrium, salt deposition tends to remain low because of leaching during long periods of normal ground-water movement and because of the relatively small volume of water that moves through the salt-containing zones. Increased water movement from greater recharge upsets the equilibrium and causes additional salt to be dissolved and flushed.

In the Fort Union Formation, dense shale or underclay beneath coal seams impedes downward movement of water, thus forcing the water to move laterally along the coal seams until it comes to the surface in low areas. Alternate crop-fallow (summer fallow) farming system tends to build soil and subsoil moisture to the point where moisture is not completely utilized by crops, this increases the amount of water that reaches the land surface and evaporates.

During the period 1969 to 1975, the hydrogeology of 25 research sites in 12 counties have been investigated (Fig. 2). Over 550 test holes have been drilled and logged, water samples collected from selected holes, infiltration tests conducted, and repeated water-level and specific conductance measurements taken. Evaluation of this information together with data provided by other investigations in Montana, the Dakotas, and Canada (1, 4, 6, 8, 11, 12) provided a framework for a number of comparisons:

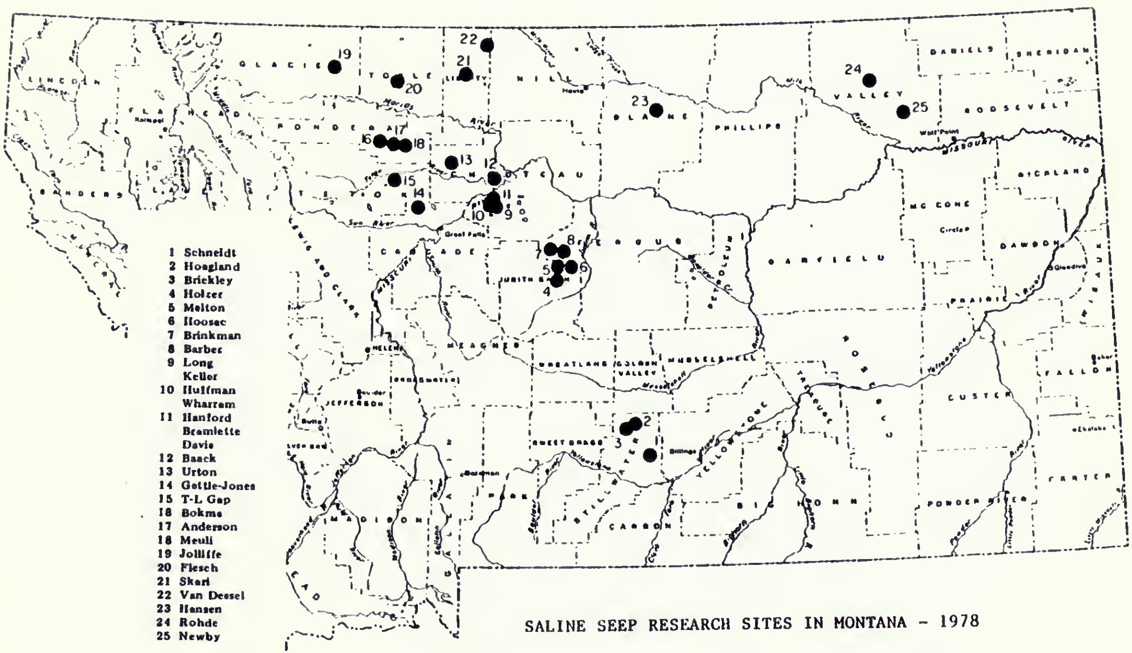
1. The alternate crop-fallow (summer fallow) farming system has been extensively utilized for at least 30 years throughout the northern Great Plains thus, providing the mechanism for regional saline-seep development.

2. The formation and development of saline seeps are the result of local ground-water flow systems. Distances from recharge areas to discharge (seep) areas are typically less than 2,500 feet.

3. The concentration of water-soluble salts contained in the soil profile and underlying substratum is quite variable but is usually high throughout the region. Some of the highest salt concentrations appear to be in northcentral (triangle area) Montana.

4. The chemical composition of saline-seep water is remarkably uniform. During the evolution of a typical saline seep, the ground-water quality changes from calcium bicarbonate type of water with relatively low Total Dissolved Solids (1,500 to 3,000 milligrams per liter) to a sodium-magnesium sulfate type of water with high Total Dissolved Solids (4,000 to 60,000

Figure 2



SALINE SEEP RESEARCH SITES IN MONTANA - 1978

milligrams per liter). In addition to the high Total Dissolved Solids (TDS) saline-seep water commonly contains much higher concentrations of nitrates and trace metals (1, 5, 6).

5. Because of the low chloride concentration in saline-seep water, seep water can be readily distinguished from deep subsurface brines.

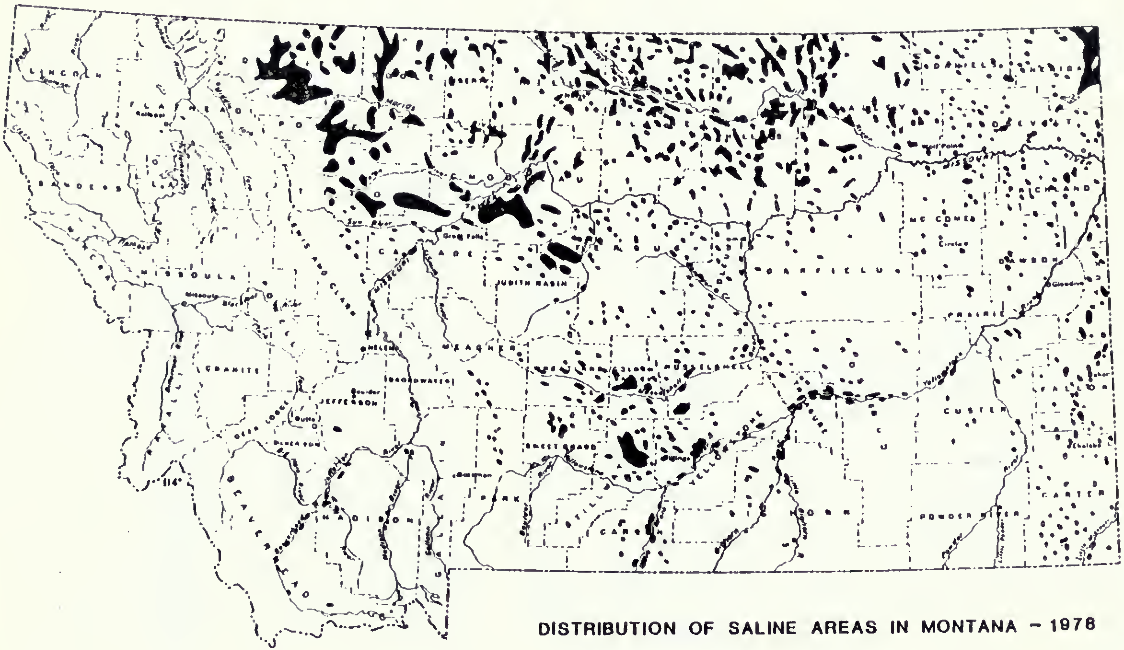
6. Intensive cropping, rotating in deep-rooted perennial crops, such as alfalfa, has been effective in stabilizing and, in some cases, reducing the size of the seep-affected area (2, 3, 4, 8). A five-year stand of alfalfa planted on one research site south of Fort Benton lowered the water table an average of 8 feet over the entire site and a 10 to 15 percent reduction in ground-water salinity has occurred.

Based on available data gathered from site-specific research test areas, it appears that specific conductance (approximation of Total Dissolved Solids) coupled with scattered chemical analyses provides useful and effective tools to assess the effect of saline seep on shallow ground-water resources and to establish regional water-quality trends.

REGIONAL EXTENT OF SALINE-SEEP DEVELOPMENT IN MONTANA

In the late 40's and early 50's a few scattered saline seeps were noted in Montana and western Canada. Since then, areas of saline seep have increased rapidly. Recent surveys (13) indicate that saline seeps have taken roughly 200,000 acres of Montana's dryland from agricultural production and that an area of roughly 2 million acres is now out of production in the Great Plains Region (Montana, North and South Dakota, Alberta, Saskatchewan, and Manitoba). The general distribution of areas in Montana that are seriously affected by salinity is shown on Fig. 2; the map is based on an aerial and field reconnaissance survey completed in 1977. Careful evaluation of the map and previous estimates suggest that the 200,000 acre figure may be somewhat low. Seep-affected areas in northern and central Montana appear to be considerably greater than previously estimated and conversely, in southern and eastern Montana the seep-affected areas appeared to be less than previous estimates.

Figure 3



DISTRIBUTION OF SALINE AREAS IN MONTANA – 1978

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An example illustrating saline-seep development over a 30-year period (1941-1971) in a 4-square mile area near Fort Benton, Montana, is shown in Fig. 4. On a region-wide basis, the acreage of saline seep appears to be expanding at an average rate exceeding 10 percent per year. The rate varies from year to year depending upon climate, but the general trend is toward significant increase. Expansion of seep areas by 20 to 200 percent in wet years is not uncommon, whereas expansion of only a few percent may occur in dry years.

Research indicates that fallow areas can undergo a water-table rise of 1 to 15 feet during years of average or above-average spring precipitation. The water levels gradually decline during the rest of the year but normally do not reach the low of the previous year. As a result, excess water accumulates through the years, causing expansion of the saline seeps during each succeeding wet cycle. Currently, seep development is especially rapid in areas where glacial till is less than 50 feet thick. Excess water is probably building up also in extensive areas underlain by greater thicknesses of till, but as yet the buildup is not evident at the surface.

Geological conditions favoring saline-seep development extend over vast areas of Montana, the Dakotas, and the three prairie provinces of Canada. These plains are the major grain-growing regions of North America, and the cropping system is dominantly an alternate crop-fallow rotation system. As long as all factors contributing to salinization continue, the situation can only worsen.

ALGAL SURVEY OF SELECTED STREAMS AND RESERVOIRS

As previously mentioned, 100 biological specimens were collected from scattered streams and ponds in eastern Montana and the results of this algal survey are discussed in detail in the last section of this report. Significant findings specifically related to the saline-seep problems are:

1. Potentially toxic blue-green algae were present in 25 percent of the samples analyzed and were found in water with Total Dissolved Solids varying from 368 to 23,819 milligrams per liter.

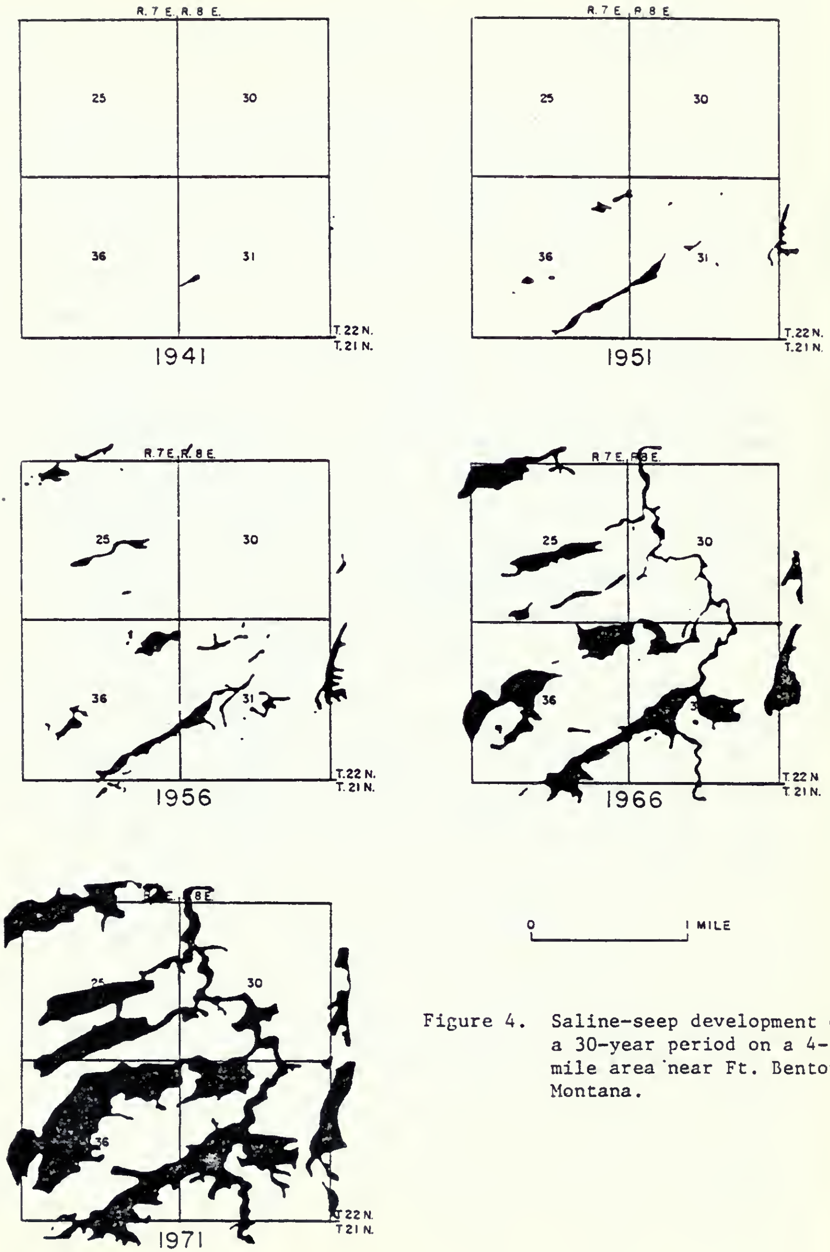

Figure 4. Saline-seep development over a 30-year period on a 4-square mile area near Ft. Benton, Montana.

2. Diatom diversity was significant and was related inversely to specific conductance.

WATER QUALITY AND SPECIFIC CONDUCTANCE SURVEY OF THE MONTANA PLAINS

Data collected to fulfill specific Tasks 1 and 2 are presented in the following section. For uniformity of presentation and to better show the distribution of sample sites, the data was not plotted on county base maps but on 1^{o}x 2^{o} Army Map service maps with a scale of ¼ inch equals one mile.

Eighteen 1^{o}x 2^{o} maps, each covering about 6,900 square miles, were needed to encompass the Montana plains. The 1^{o}x 2^{o} maps are arranged in this section in alphabetical order instead of geographical order. The following 1^{o}x 2^{o} maps will be found in this section: Billings, Bozeman, Choteau, Cut Bank, Ekalaka, Forsyth, Glasgow, Glendive, Great Falls, Hardin, Havre, Jordan, Lewistown, Miles City, Roundup, Shelby, White Sulphur Springs, and Wolf Point. Each 1^{o}x 2^{o} map is subdivided into eight 30 minute by 30 minute page-sized sheets. The arrangement of the sheets is shown on the Location Base Map sheet that precedes each 1^{o}x 2^{o} map section.

Each site evaluated was carefully located using the site location system (Township, Range, Section, and tract) described on pages 21 and 22. Hopefully many of these sites can be re-evaluated in the future to document changes and to quantify water quality trends.

The several types of symbols used on the specific conductance survey maps refers to the sample source (spring, well, pond, etc.). The legend for these symbols is given on page 23. Two numbers generally accompany each symbol. The number in parenthesis is the map reference number. This number is repeated in the Specific Conductivity Inventory section where additional information about the site may be found. The map reference number also will be found in the Chemical Analyses of Selected Waters and Trace Elements Analyses sections if a water sample from that site was chemically analysed. The other number generally included with each symbol is the specific conductance (corrected to 25^{o}C) of water from that site.

Specific conductance (SC) is a measurement of the waters capacity to conduct an electric current. Because it varies directly with both temperature and the overall salinity of the water, all values are converted to 25 degrees Celsius making salinity the only variable. When the SC is measured in micromhos per centimeter, it roughly equals the Total Dissolved Solids (TDS) content in milligrams per liter (mg/l). The general relationships between SC and TDS is illustrated in Fig. 5. Note that when TDS is less than 8,000 mg/l the SC is about .8 to .9 times TDS, they are about equal when TDS is between 8,000 and 12,000 mg/l, and when the TDS is greater than 12,000 mg/l the SC is about 1.1 to 3.0 times TDS.

Part of the project to investigate regional aspects of water quality necessitated identification of water source by aquifer. This was to help determine if water from some aquifers yielded water more suitable for human and livestock consumption and also to see if water quality changed regionally within that aquifer. The aquifer code is thus included with many sample sites. The explanation for the aquifer code will be found on pages 23 and 24.

A summary of the regional saline-seep assessment by AMS 1°x 2° sheets is tabulated in Table 1. During the project 2,876 sites were evaluated in the field, 452 water samples were collected with 247 of these analysed for trace elements. Of the 2,800 plus sites, 14 percent had SC values less than 500; 16 percent between 500 and 1,000, 64 percent between 1,000 and 10,000; and 6 percent over 10,000 micromhos per centimeter. Because of the above-average precipitation during the 2-year period of the project, the reported SC values obtained from all the surface-water sites (about 50%) were undoubtly low. Conductivity and trace-metal concentrations were considerably higher in wells penetrating the glacial and Cretaceous marine aquifers (northern and central Montana) than in the non-marine late Cretaceous and Tertiary aquifers. Chemical composition of ground water collected in glaciated portions of Montana were predominantly the sodium-magnesium sulfate type--similar to water collected from research test holes.

Significant concentrations of trace elements particularly selenium and boron, were found in many of the ground-water samples. Of the 160 samples

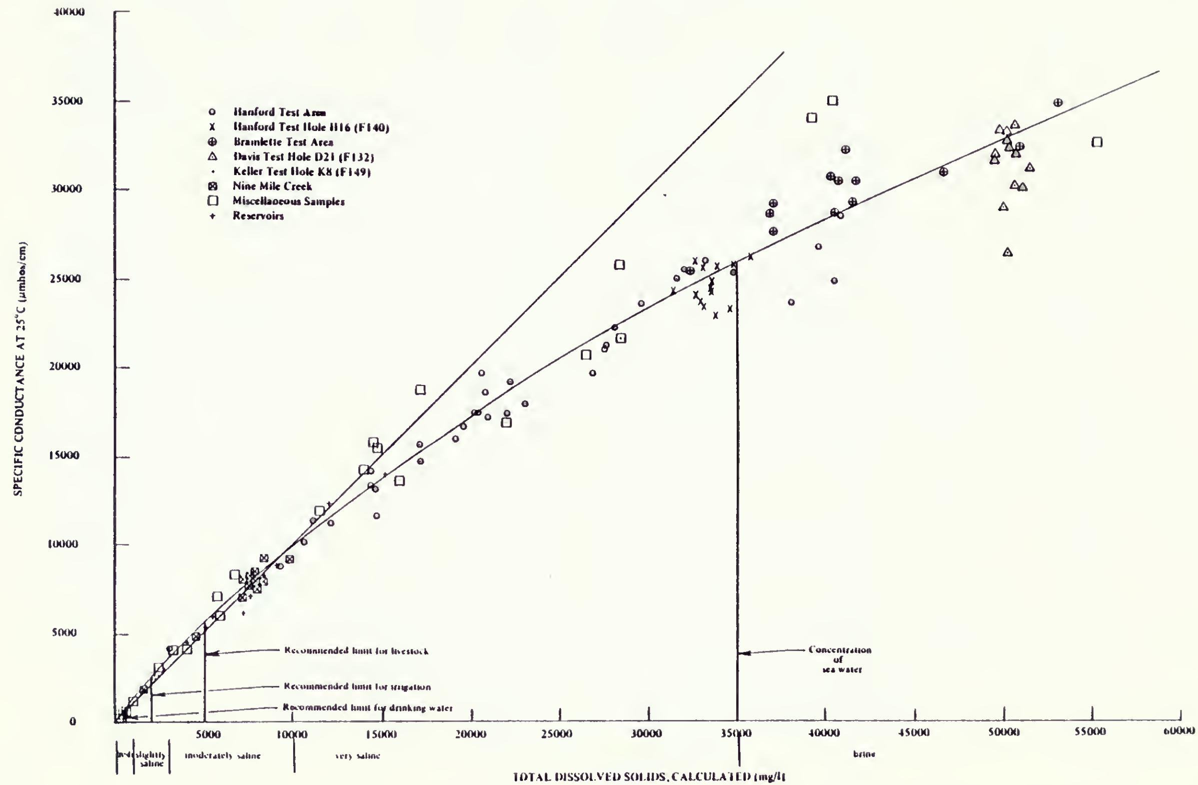

Figure 5.–Comparison between total dissolved solids and specific conductance of water samples from Highwood Bench area.

Table 1

AMS $1^{o} \times 2^{o}$ sheet	SUMMARY OF SALINE SEEP ASSESSMENT RESULTS								
	NUMBER OF SITES EVALUATED	NUMBER OF CHEMICAL ANALYSES	NUMBER OF CHEMICAL ANALYSES COLL. 75'-78'	NUMBER OF TRACE ANALYSES	NUMBER OF SITES WITH SC < 500	NUMBER OF SITES WITH SC 500-1000	NUMBER OF SITES WITH SC 1000-10000	NUMBER OF SITES WITH SC > 10000	NUMBER OF ALGAL SAMPLES
BILLINGS	149	73	54	24	9	16	81	28	15
BOZEMAN	18	5	5	0	11	5	2	0	0
CHOTEAU	66	11	11	5	22	21	22	1	2
CUT BANK	180	103	28	20	16	17	78	1	0
EKALAKA	26	14	11	0	0	0	26	0	0
FORSYTH	72	44	13	6	5	6	45	11	0
GLASGOW	194	29	21	21	17	44	120	2	7
GLENDIVE	132	54	37	20	6	8	95	14	6
GREAT FALLS	261	37	35	35	46	65	130	14	7
HARDIN	231	220	32	22	2	19	192	3	1
HAVRE	305	42	18	17	76	49	166	2	8
JORDAN	73	11	5	2	8	4	52	4	5
LEWISTOWN	195	46	18	18	25	33	102	6	21
MILES CITY	90	31	13	1	4	5	61	15	0
ROUNDUP	207	64	27	12	24	48	106	7	9
SHELBY	367	60	57	42	65	31	242	15	3
WHITE SUL. SPRINGS	51	11	7	0	21	16	12	1	0
WOLF POINT	259	168	60	2	19	32	155	40	16
TOTAL	2876	1023	452	247	376	419	1687	164	100

analysed for selenium over 30 percent had concentrations greater than 10 micrograms per liter (μg/l). Analyses of water collected from aquifers associated with the Colorado Shale, which is known to be seleniferous, showed that 59 percent of the water samples contained more than the 10 mg/l limit for potable water set by U.S. Public Health Service; some values were as high as 1,800 μg/l. Many of these wells are being used for domestic or stock watering purposes.

CONCLUSIONS

Because of the lack of a detailed historical database, it is difficult to quantify the effects of saline-seep development on the surface water and shallow ground-water resources of the area, however, presently available data suggest that significant water-quality deterioration has occurred in the glaciated portion of Montana where dryland farming has been a way-of-life for many years. Several other areas of concern are in Judith Basin, Fergus, and Stillwater counties where saline seep is spreading rapidly. Undoubtedly, many other areas have local problems, but our sampling base was not dense enough to delineate them.

Numerous discussions with county agents, district conservationist, and rural leaders typically support the above statements, and probably the most convincing statements came from the landowners. Some of the more frequent statements made by farmers are:

a) "Our well or wells went bad and we have been hauling water for years".

b) "Over the last 5 (to 20) years we have had to drill 2 (to 4) wells, each one deeper than the last to get good water".

c) "Three (to 5) years ago our well turned bad during the spring, and each year we have to haul water for a longer period of time".

d) "All the wells in the area have gone bad, that is why we hooked up to the rural water distribution system".

e) "During the last 5 (to 15) years, springs have appeared in several coulees and now the banks are sliding into the draw".

f) "The cows will drink from the reservoir only during the spring of the year".

g) "My reservoir used to be the best fishing in these parts, but the fish all died 1 (to 10) years ago".

h) "I don't have any freshwater left on my place, so I guess I'll sell all my cattle and plow-up the rest of my pasture".

i) "Over the last 2 (to 10) years I have had to pump out by basement each spring, and it seems to be getting worse".

j) "Last year my shelter-belt began to die".

All of these statements and many more imply that the local ground-water flow system is out of equilibrium, flushing the salts out of the profile, and is rapidly contaminating the water resources of the area.

RECOMMENDATIONS

1. Immediately intensify cropping practices over the entire northern plains region to hopefully get the problem stabilized.
2. Rotate deep-rooted legumes such as alfalfa into the cropping system, particularly on recharge areas.
3. Surface drainage of upland, freshwater potholes that are noramlly cultivated should be encouraged. Research on all drainage systems particularly subsurface drains, should be initiated to determine the long- and short-term benefits, if any.
4. Maintain an active and comprehensive monitoring and sampling network throughout the region to use for forecasting ground-water conditions in a given area; to quantify long- and short-term changes in water quality; and to evaluate the effectiveness of various cropping systems in controlling saline-seep formation (demonstration- and research-site programs).
5. Initiate research on the distribution, behavior, and potential for toxicity of selected trace elements in ground water of the northern Great Plains--immediate attention should be given to selenium.
6. Maintain and add water-quality information to data-systems to document and quantify future changes and trends. A follow-up regional inventory in 5 to 8 years utilizing many of the wells evaluated in the present study would be particularly valuable in achieving this objective.
7. Encourage and promote a coordinated research, education, and extension program to hopefully get control of the saline-seep problem in the shortest amount of time.

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8. Halvorson, A. D., and Black, A. L., 1974, Saline-seep development in dry-land soils of northeastern Montana: Jour. Soil and Water Conserv., vol. 29 (2), p. 77-81.

9. Miller, M. R., 1971, Hydrogeology of saline-seep spots in dryland farm areas--a preliminary evaluation, in Proceedings of Saline Seep-Fallow Workshop, Great Falls, Montana, Feb. 22-23, 1971, 12 p.

10. Miller, M. R., and Others, 1976, An overview of saline-seep programs in the states andprovinces of the great plains; in Proceedings on Regional Saline Seep Control Symposium, Bozeman, Montana: Montana Cooperative Extension Service Bulletin 1132, p. 4-17.

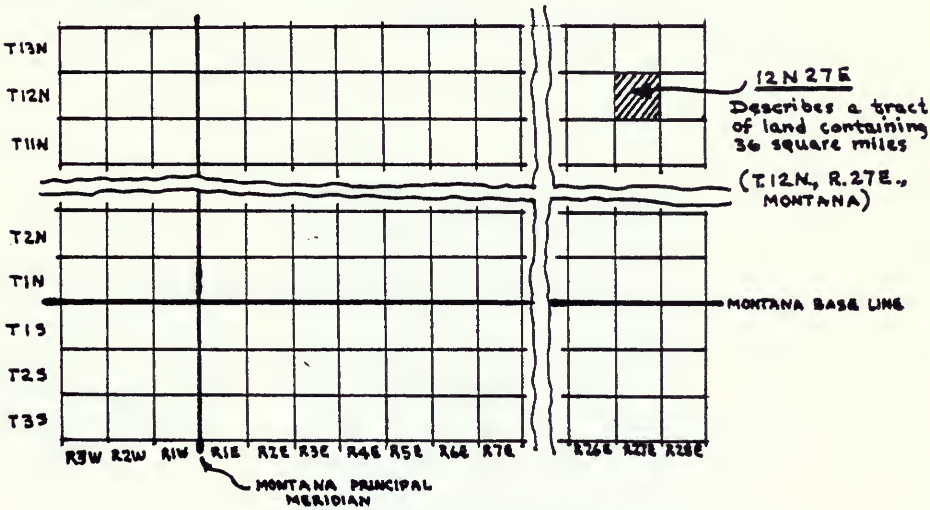
11. Sommerfeldt, T., 1976, Snow and water studies, Nobleford. Dryland Salinity and Seepage in Alberta Progress Report.

12. Thompson, G. R., and Custer, S. G., 1976, Shallow ground water salinization in dryland-farm areas of Montana: Montana University Joint Water Resources Research Center, Bozeman, Montana, Report No. 79, 212 p.

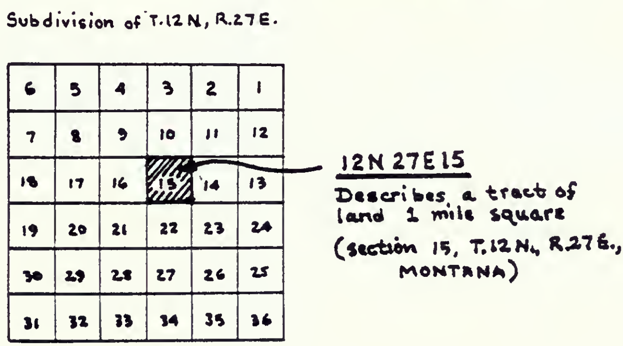
13. Vander Plyum, H. S. A., 1978, Extent, causes, and control of dryland saline seepage in the Northern Great Plains region of North America: in Proceedings of the Subcommission of Salt-Affected Soils at the 11th International Soil Science Society Congress, Edmonton, Canada, p. 1-48 to 1-58.

SITE LOCATION SYSTEM

The location of objects in Montana (such as wells, springs, ponds, etc.) is referenced to the legal subdivisions of public lands--that is--by Township, Range, Section, and Quarters of a section. Thus a site description of 12 N 27E designates a particular township, 6 miles on a side, that lies 12 townships north of the Montana Base Line and 27 townships east of the Montana Principal Meridian.



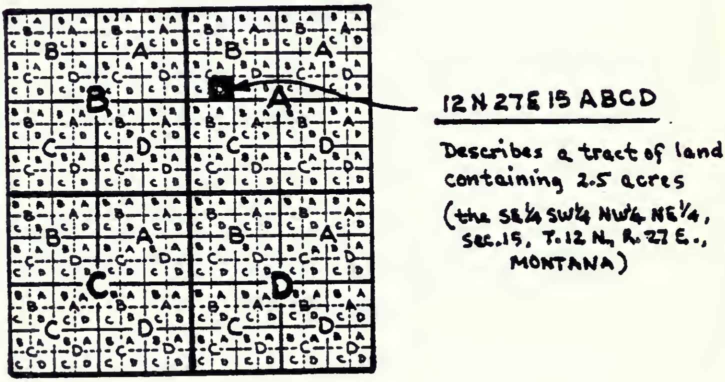
Each township is subdivided into 36 sections as follows:



The subdivision of a particular section into quarters, however, departs from legal usage in that the letters A, B, C, and D are used for the NE¼, NW¼, SW¼, and SE¼ respectively. Additionally the quartering of a section in the Site Location System begins with the largest quarter (the 160-acre tract) then proceeds to the 40-acre tract, the 10-acre tract, and the 2.5-acre tract. If, for example, a well site is described as 12N 27E 15 ABCD, the location of that well is in the SE¼, SW¼, NW¼ of the NE¼, Section 15, Township 12N, Range 27E. In the sequence ABCD, the 1st letter (A) describes the NE¼, the 2nd letter (B) calls out the NW¼ <u>of the NE¼</u>, the 3rd letter (C) calls out the SW¼ <u>of the NW¼ of the NE¼</u>, and the 4th letter (D) calls out the SE¼ <u>of the SW¼ of the NW¼ of the NE¼</u>.

Each section is subdivided into quarters as follows:

Subdivision of Sec. 15, T.12N., R.27E.



If more than one object is being described in a particular 2.5-acre tract, sequence numbers 1, 2, 3 . . . etc. are given to those objects to distinquish them. Thus 12N 27E 15 $ABCD_2$ refers to object 2 in the SE¼ SW¼ NW¼ NE¼ section 15, Township 12 North, Range 27 East, Montana.

LEGEND FOR MAP SYMBOLS

⊙	●	creek, river, stream
▽	▼	ditch, drain
✣	✚	seep
⊡	■	lake, pond, marsh
△	▲	well
◇	◆	spring

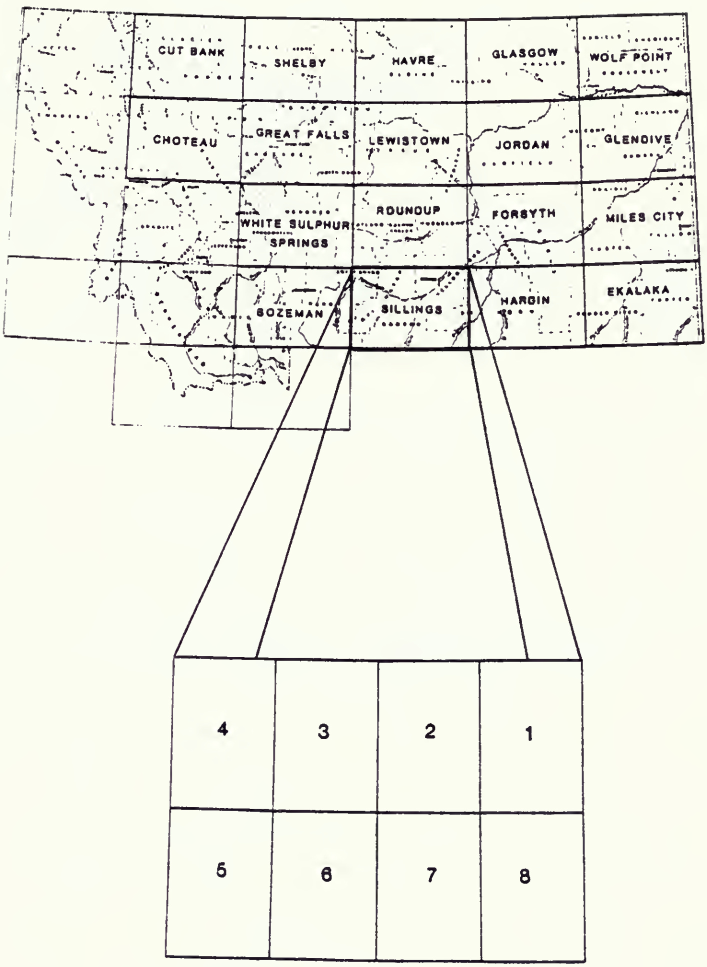
Solid symbols indicate that a chemical analysis is available

LEGEND FOR AQUIFER CODE

CODE	AGE	FORMATION
110ALVM	Quaternary	Alluvium
110CLVM	Quaternary	Colluvium
110TRRC	Quaternary	Terrace deposits
112DRFT	Pleistocene	Glacial drift
112GCLO	Pleistocene	Glacial outwash
112GLCC	Pleistocene	Glacial lake deposits
112OTSH	Pleistocene	Outwash
112TILL	Pleistocene	Glacial till
112TRRC	Pleistocene	Terrace deposits
121FLXV	Pliocene	Flaxville Formation
125FRUN	Paleocene	Fort Union Formation
125TGRV	Paleocene	Tongue River Member
125TLCK	Paleocene	Tullock Member
210CLRD	See 211CLRD	
211BRPW	Cretaceous	Bearpaw Shale
211CLGT	Cretaceous	Claggett Shale
211CLRD	Cretaceous	Colorado Group
211EGLE	Cretaceous	Eagle Sandstone
211FRNR	Cretaceous	Frontier Formation
211FXHL	Cretaceous	Fox Hills Formation
211HLCK	Cretaceous	Hell Creek Formation
211JDRV	Cretaceous	Judith River Formation
211MRSN	See 221MRSN	

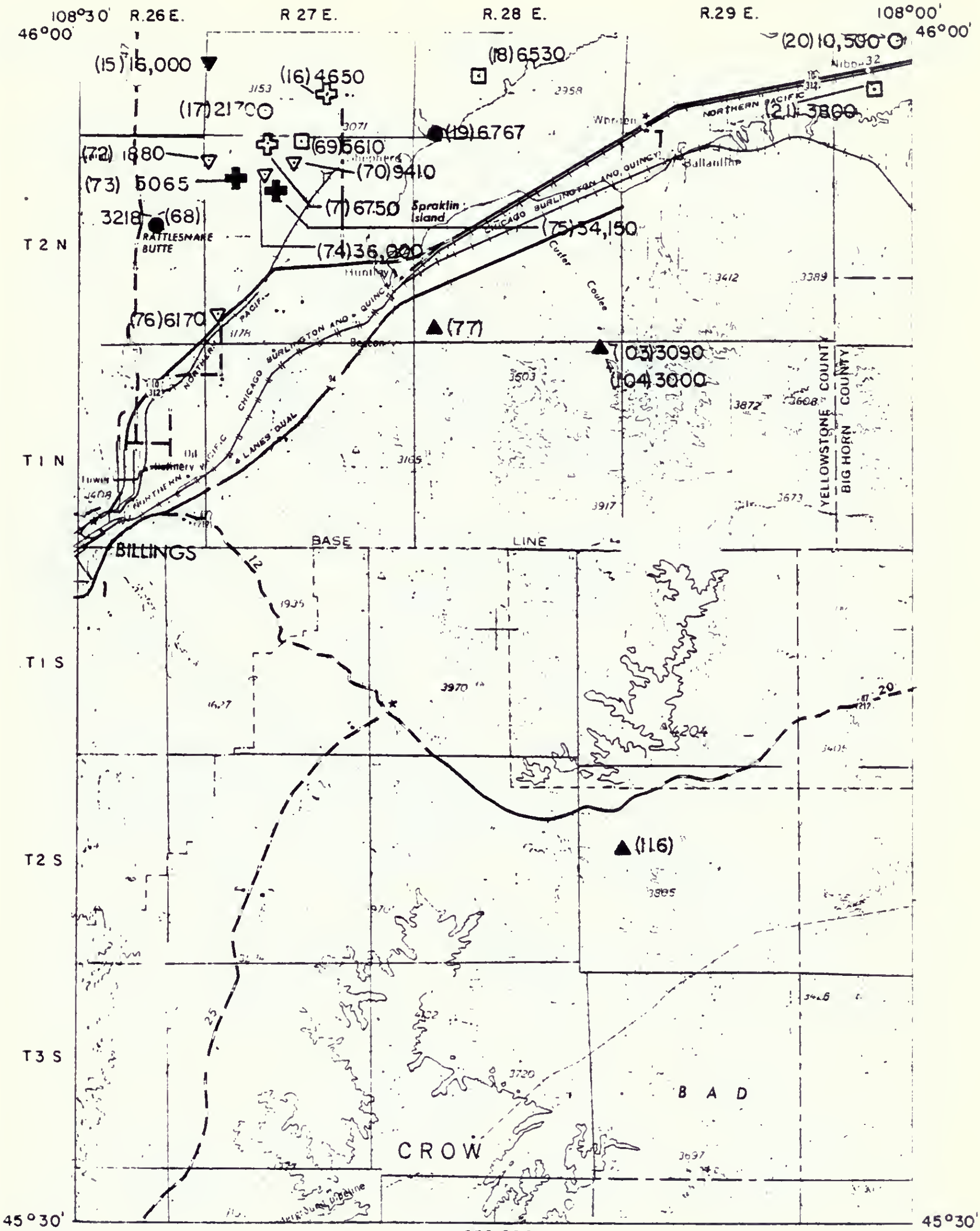
CODE	AGE	FORMATION
211MSBY	Cretaceous	Mosby Sandstone
211TMDC	Cretaceous	Two Medicine Formation
211TPCK	Cretaceous	Telegraph Creek Formation
211VLCC	Cretaceous	Volcanic rocks
211VRGL	Cretaceous	Virgille Sandstone
217DKOT	Cretaceous	Dakota Sandstone
217KOTN	Cretaceous	Kootenai Formation
217LKOT	Cretaceous	Lakota Sandstone
217MDDY	Cretaceous	Muddy Sandstone
217SCCK	Cretaceous	Second Cat Creek Sandstone
221MRSN	Jurassic	Morrison Formation
221SWFT	Jurassic	Swift Formation
224PIPR	Jurassic	Piper Formation
230SPRF	Triassic	Spearfish Formation
317TSLP	Permian	Tensleep Sandstone
320AMSD	Pennsylvanian	Amsden Formation
320TSLP	See 317TSLP	
320TYLR	Pennsylvanian	Tyler Formation
331CRLS	Mississippian	Charles Formation
331HETH	Mississippian	Heath Formation
331KBBY	Mississippian	Kibbey Formation
331MDSN	Mississippian	Madison Group
331MSNC	Mississippian	Mission Canyon Limestone
337LDGP	Mississippian	Lodgepole Limestone
337MSNC	See 331MSNC	

LOCATION BASE MAP



BILLINGS 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

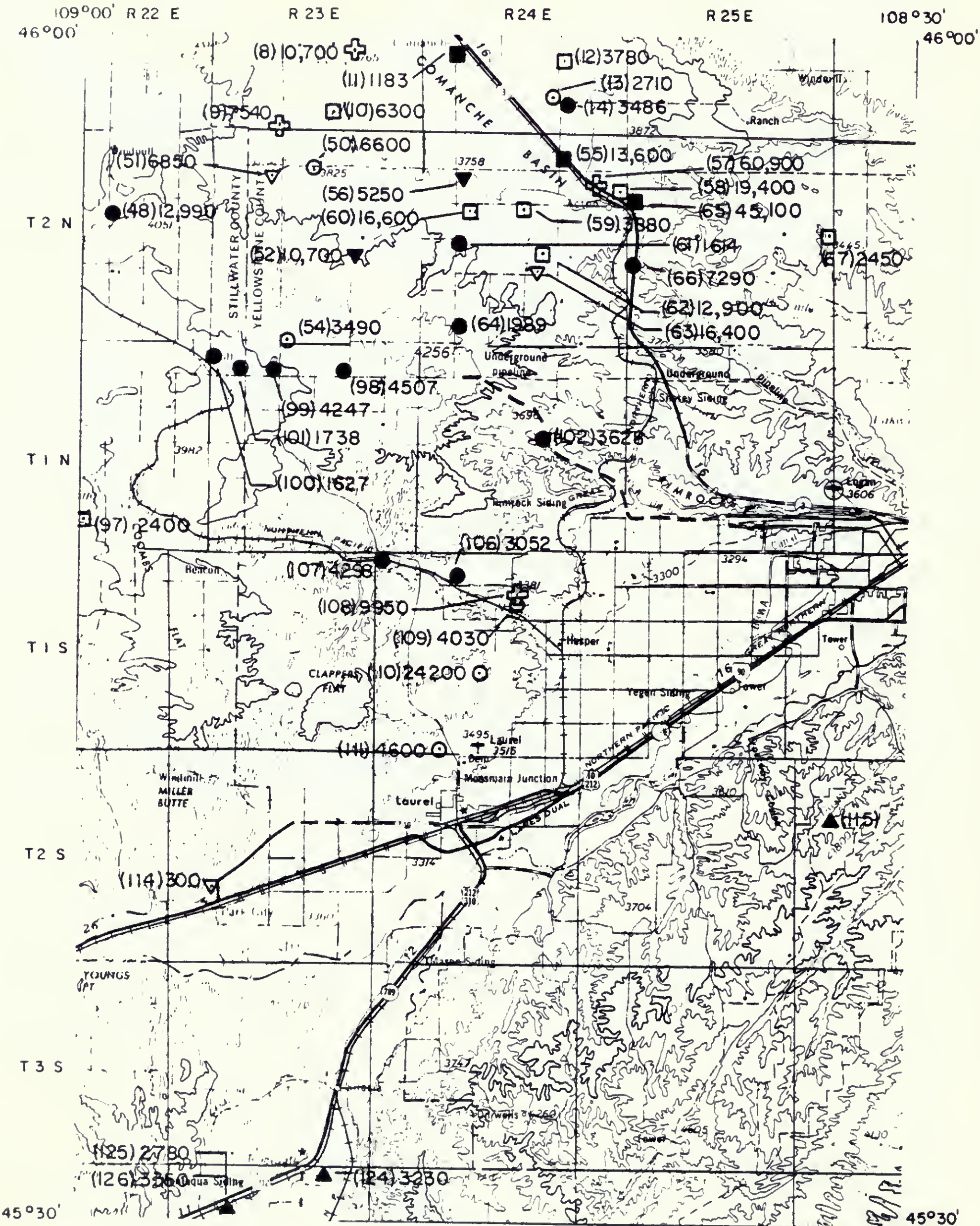


1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



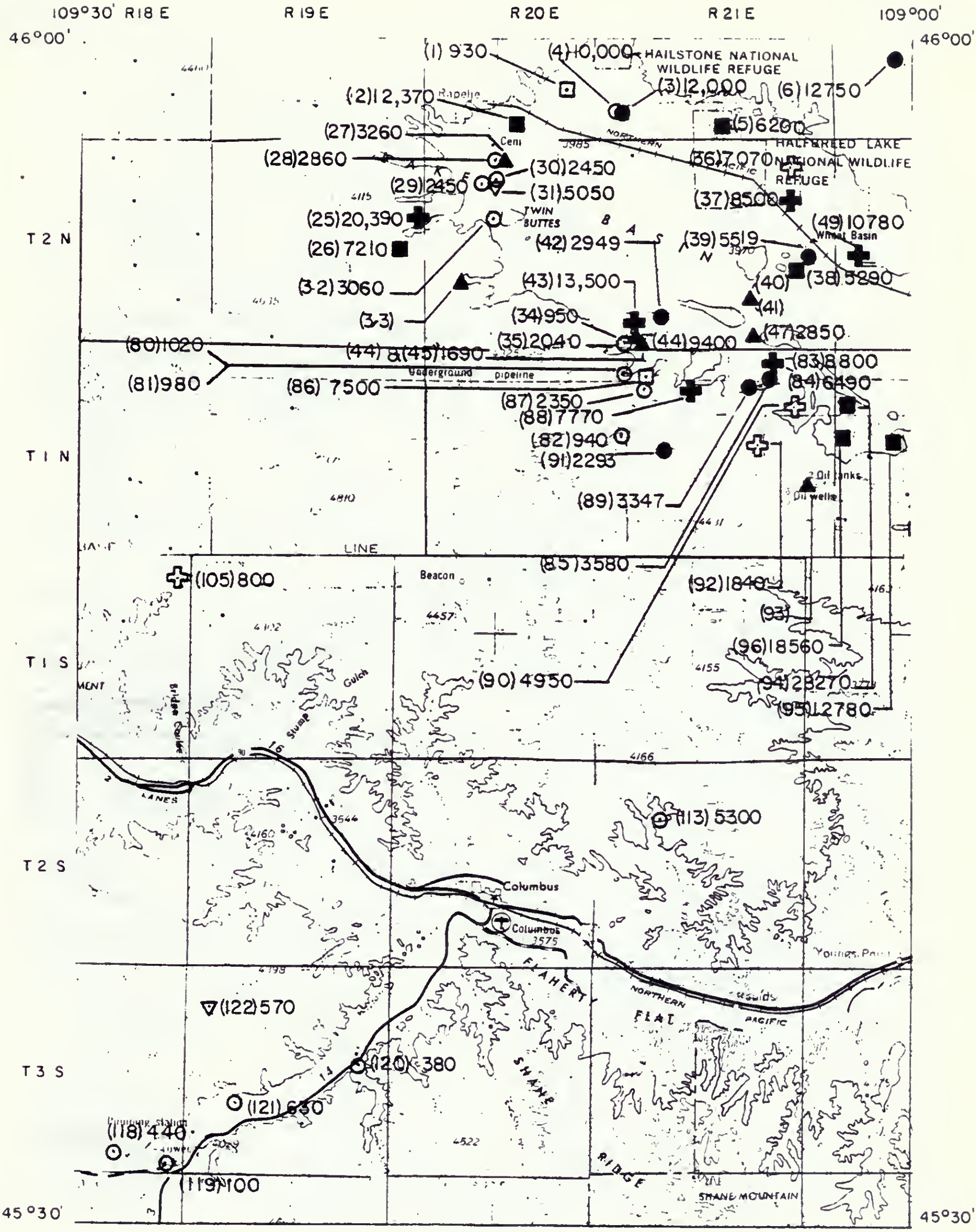
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



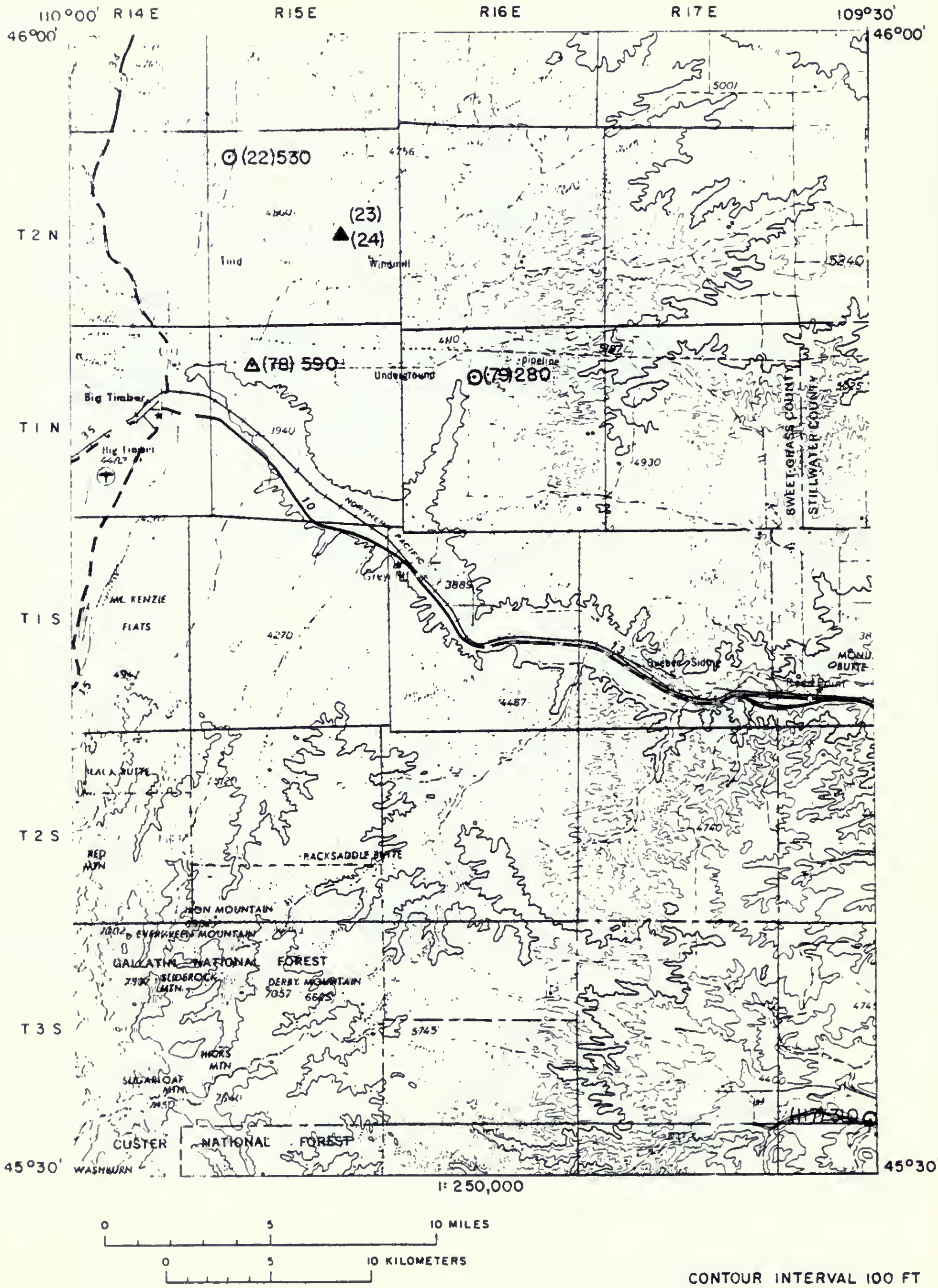
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

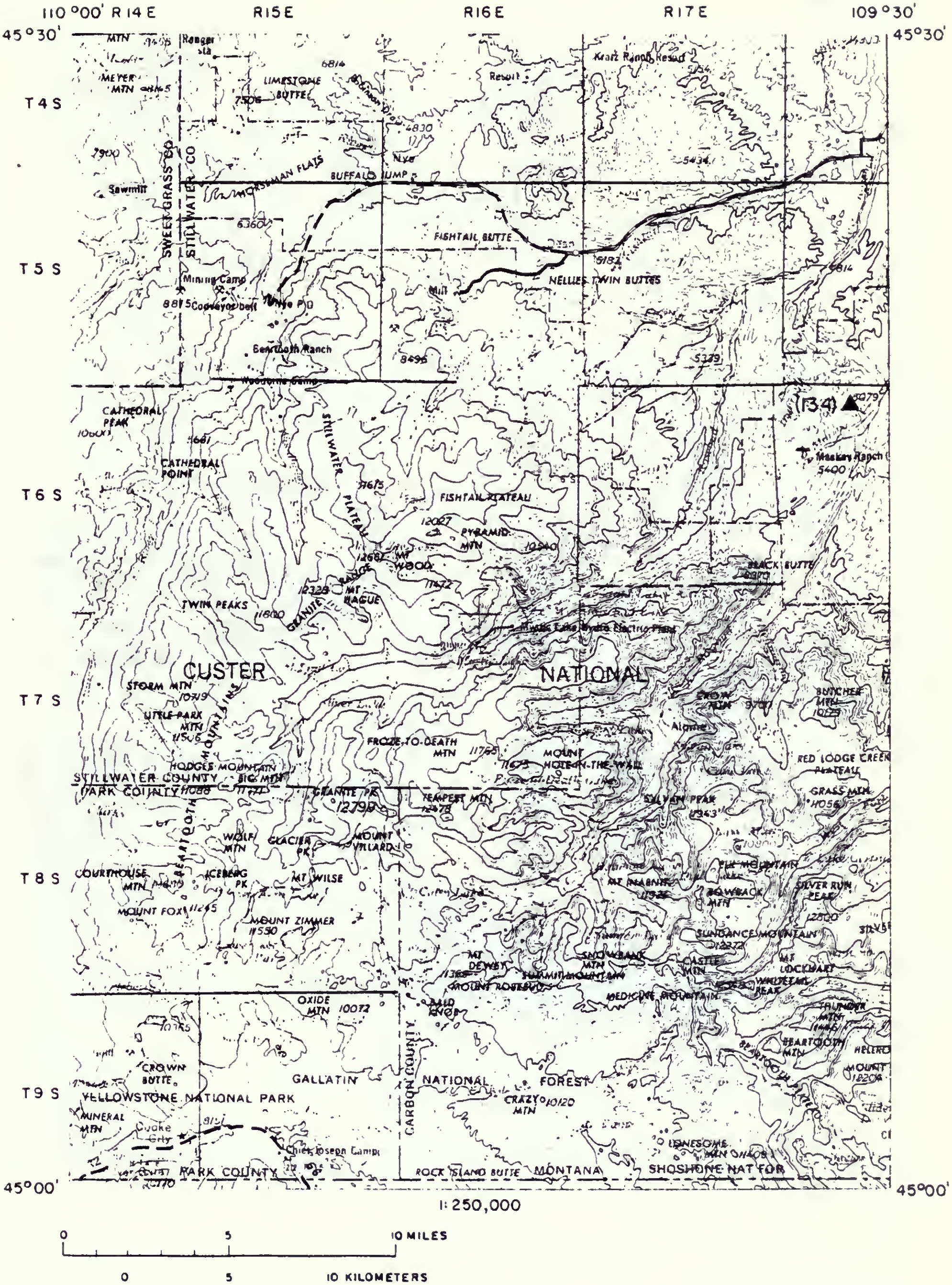
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY

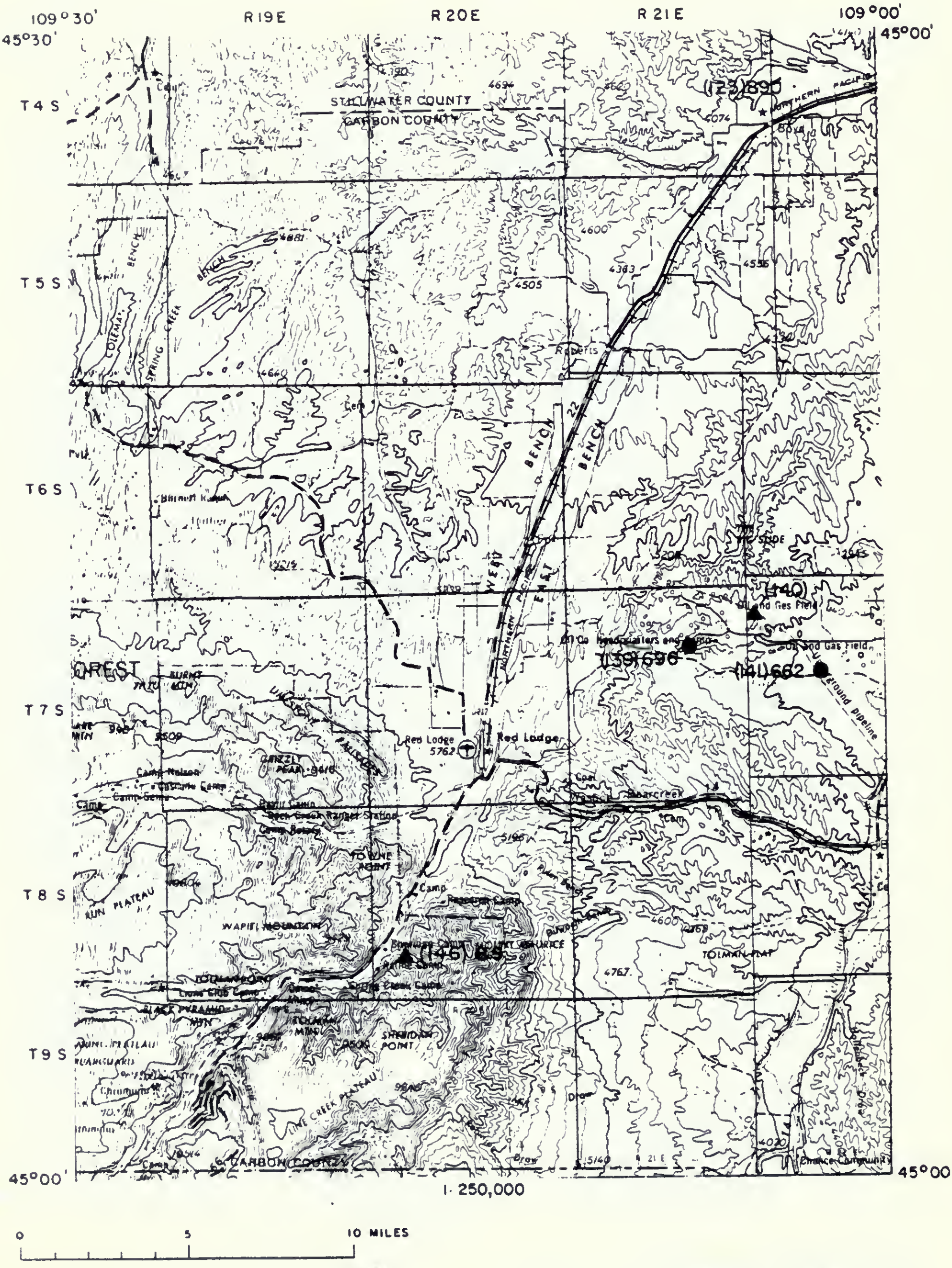
BILLINGS 5



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

BILLINGS 6



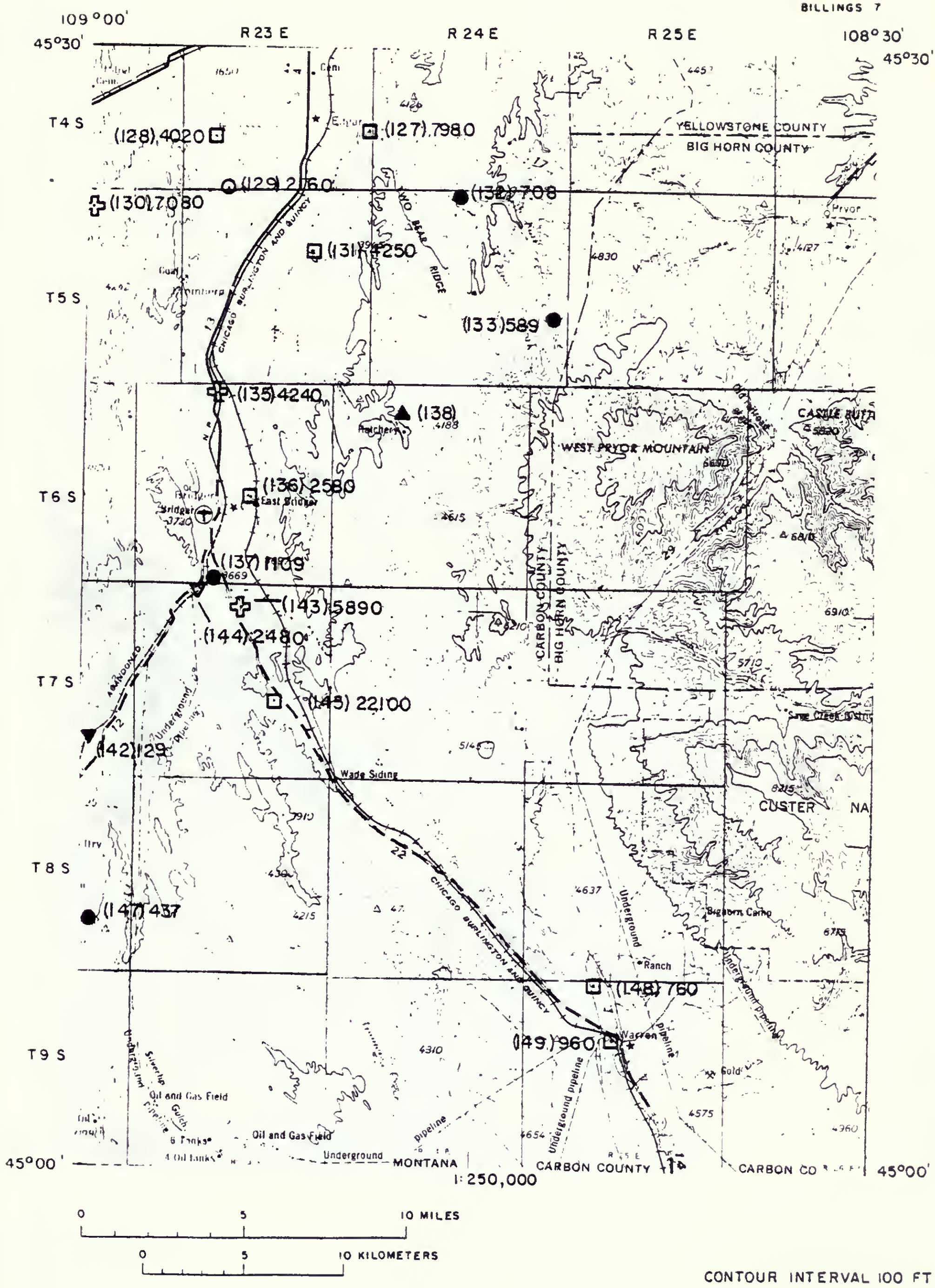
1:250,000

0 5 10 MILES

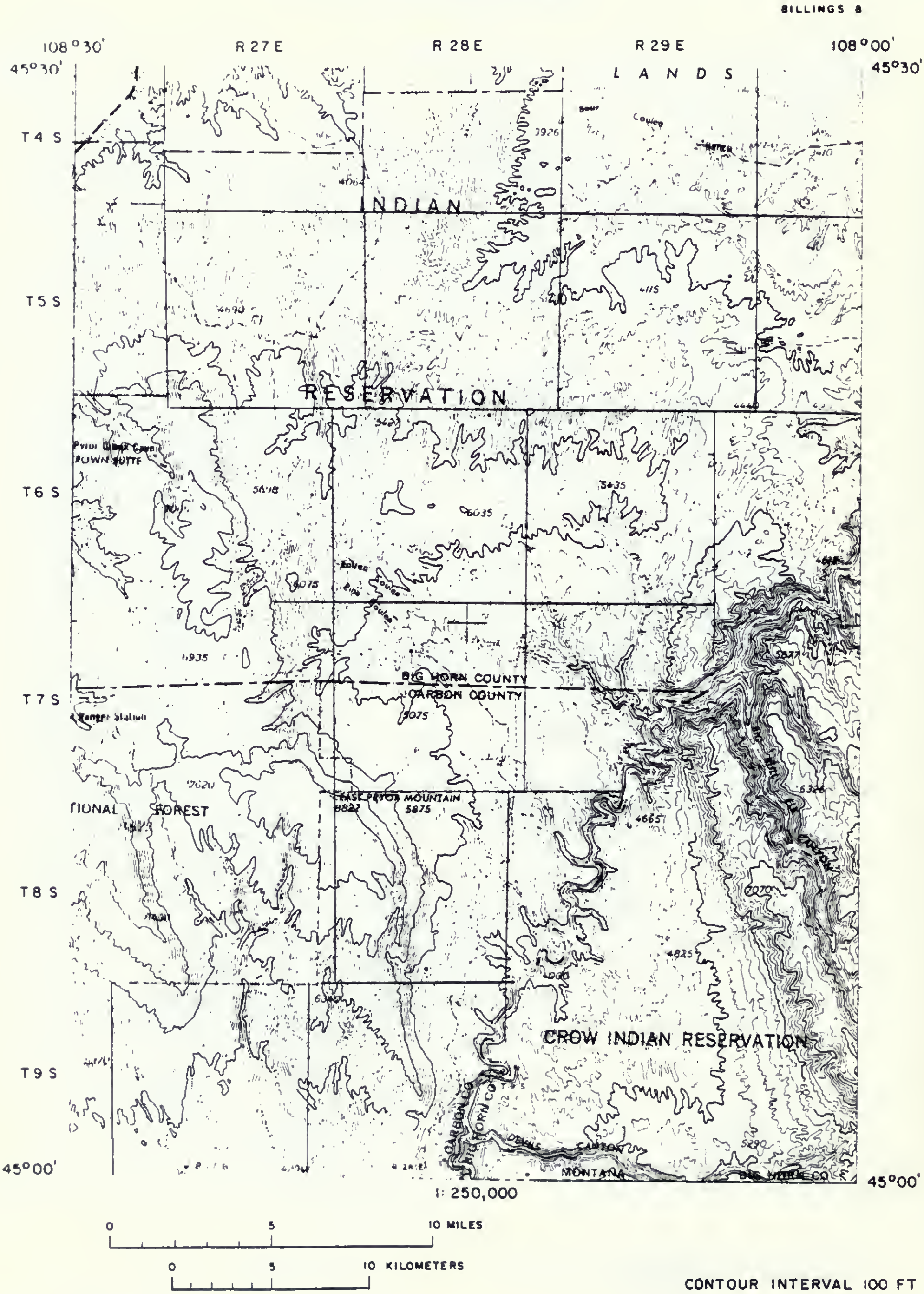
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY



BILLINGS 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 26°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB 31	Stillwater	03N 20E 26 CBA	08 17 76	Pond	no flow	Located 2.2 miles E NE of Rapelje	930		no					
2	WQB29	Stillwater	03N 20E 33	08 17 78	Lake		Dallman Lake, one mile E of Rapelje	12370	21	yes					
3	WQB6	Stillwater	03N 20E 36 AA	04 21 76	Creek	20 gpm (E)	Dylan Creek at Four-Mile Corner E of Rapelje	12000	17	yes					
4	WQB5	Stillwater	03N 20E 36 AB	04 21 76	Creek	no flow	Cindi Creek E of Rapelje	10000		no					
5	WDB46	Stillwater	03N 21E 33 DBA	08 19 76	Lake	no flow	N end of Halfbreed Lake	6200	19	yes					
6	WQB45	Stillwater	03N 22E 20 DCD	08 19 76	Creek	no flow	Lost Creek 6 miles N NE of Big Lake	12750	19	yes					
7	not on map														
8	WQB57	Yellowstone	03N 23E 28 CB	10 13 76	Seep	no flow	Saline seep marsh	10700		no					
9	WQB58	Yellowstone	03N 23E 32 DD	10 13 76	Seep	no flow	Saline seep	7540		no					
10	WQB30	Yellowstone	03N 23E 33	04 09 78	Pond		Drains dryland farm area	6300		no					
11	WQB17	Yellowstone	03N 24E 20 CA	06 25 76	Pond	no flow	Comanche Marsh	1183	18.8	yes					
12	WQB24	Yellowstone	03N 24E 23 CC		Pond		Stock use	3780		no					
13	WQB35	Yellowstone	03N 24E 27 DD	10 04 76	Creek	no flow	Located 3 miles SE of Comanche	2710		no					
14	WQB23	Yellowstone	03N 24E 35 BC	04 09 76	Creek	50 gpm (E)	Along road 1.8 miles N of Acton	3486	18	yes					
15	WQB20	Yellowstone	03N 27E 19 CC	04 08 76	Ditch	no flow	Drainage ditch N of Billings	16000	17	yes					
16	WQB49	Yellowstone	03N 27E 27 DCC	10 12 76	Seep	no flow	Large seep area 2 miles N of Shepherd	4650		no					
17	WQB50	Yellowstone	03N 27E 32 AA	10 12 78	Creek	1 cfs (E)	Marshy area near road junction	2170		no					
18	WQB48	Yellowstone	03N 28E 29 AA	10 12 76	Marsh	no flow	Seep area at edge of field	6630		no					
19	WDB21	Yellowstone	03N 28E 31 BC	04 08 76	Creek	2 cfs (E)	Razor Creek NE of Shepherd	6767	20	yes					
20	WQB41	Yellowstone	03N 30E 20 A	10 12 76	Creek	no flow	Pompeys Piller Creek	10500		no					
21	WQB42	Yellowstone	03N 30E 29 CB	10 12 76	Pond	no flow	Nibbe Pond	3800		no					
22	WQB8	Yellowstone	02N 16E 06 DDA	10 27 76	Creek	4 cfs (E)	Tenmile Creek	530		no					
23	32M0002	Sweet Grass	02N 15E 23 BB	11 32	Well		Seven miles NE of Big Timber			yes	4600			211FRNR	
24	00M0011	Sweet Grass	02N 15E 23 BB		Well		Seven miles NE of Big Timber			yes	4600			211CLRD	
25	WDB26	Stillwater	02N 19E 13 ADB	08 16 76	Seep	no flow	Located 3.5 miles S SW of Rapelje	20390	23	yes					
26	WQB28	Stillwater	02N 19E 24 BA	08 17 78	Pond	no flow	Three miles W SW of Twin Buttes	7210		yes					
27	60M0002	Stillwater	02N 20E 04 CA	11 26 60	Well		Located 1.5 miles SW of Dallman Lake	3260		yes				211EGLE	
28	WQB4	Stillwater	02N 20E 04 CB	04 21 76	Creek	1 cfs (E)	Middle Creek S of Rapelje	2860		no					
29	WQB30	Stillwater	02N 20E 08 ADA	08 17 76	Creek	1 cfs (E)	Cedar Creek at highway	2450		no					
30	WQB3	Stillwater	02N 20E 09 BB	04 21 76	Creek	2 cfs (E)	Cedar Creek S of Rapelje	2460		no					

BILLINGS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	WQB2	Stillwater	02N 20E 09 BC	04 21 78	Ditch	< 1 cfs (E)	Irrigation ditch S of Rapelje	5050		no					
32	WQB1	Stillwater	02N 20E 15 BB	04 21 75	Creek	1 cfs (E)	Gurney Creek S of Rapelje	3060		no					
33	56M0010	Stillwater	02N 20E 29 BB	12 56	Well		Four miles S of Rapelje			yes	4100			331MDSN	
34	WQB32	Stillwater	02N 20E 36 DD	08 17 76	Creek	1 cfs (E)	Struck Creek 1 mile E of Battle Butte	950		no					
35	WQB17	Stillwater	02N 20E 36 DDD	04 26 76	Creek	20 gpm (E)	Struck Creek at intersection	2040		no					
36	WQB10	Stillwater	02N 21E 02 DD	04 21 76	Seep	no flow		7070		no					
37	WQB11	Stillwater	02N 21E 11 DD	04 21 78	Seep	no flow	N of railroad track by windmill	8500	11	yes					
38	WQB44	Stillwater	02N 21E 23 DDD	08 19 76	Lake	no flow	NW corner of Big Lake	5290	17	yes					
39	WQB42	Stillwater	02N 21E 24 BCC	08 18 76	Creek	5 cfs	Between Halfbreed and Big Lakes	5519	22	yes					
40	67M0001	Stillwater	02N 21E 27 DB	01 30 67	Well		Located 1.5 miles W of Big Lake			yes	3990			211FRNR	
41	66M0025	Stillwater	02N 21E 27 DB	10 26 68	Well		Located 1.5 miles W of Big Lake			yes	3990			211FRNR	
42	WQB15	Stillwater	02N 21E 31 AA	04 26 78	Creek	0.5 cfs (E)	Greenwood Creek E of Battle Butte	2949	9.5	yes					
43	WQB16	Stillwater	02N 21E 31 BBB	04 26 76	Seep	no flow	At crossroads E of Battle Butte	13500	11.5	yes					
44	WQB19	Stillwater	02N 21E 31 CB	04 28 76	Well		Boehme well in corral	9400	9	yes					
45	WQB47	Stillwater	02N 21E 31 CD	08 19 76	Well	no flow	Boehme well in field	1690	11	yes					
46	WQB18	Stillwater	02N 21E 31 CD	04 26 76	Well		Boehme well in field	12100	9	yes					
47	58M0002	Stillwater	02N 21E 34 DB	02 05 58	Well		Located 26 miles N of Columbus	2850		yes				211FRNR	
48	WQB41	Stillwater	02N 22E 15 BCC	08 18 78	Creek	no flow	Lost Creek 3 miles NE of Big Lake	12990	21	yes					
49	WQB48	Stillwater	02N 22E 19 ACD	08 20 76	Seep	no flow	Small pond 1 mile N of Big Lake	10780	17	yes					
60	WQB31	Yellowstone	02N 23E 04 DD	04 09 76	Creek	1 cfs (E)	Brown Creek at bridge	8600		no					
51	WQB59	Yellowstone	02N 23E 08 ABB	10 13 78	Ditch	1 cfs (E)	Near saline seep areas	6850		no					
52	WQB32	Yellowstone	02N 23E 21 BCAC	04 09 76	Ditch		Drainage ditch at roadside	10700	15	yes					
53	WQB65	Yellowstone	02N 23E 32 ADD	10 13 76	Creek	1 gpm (E)	In a saline seep area	5080		no					
54	Not on map														
56	WQB22	Yellowstone	02N 24E 02 CA	04 08 78	Pond		On highway 3 miles NW of Acton	13600	12	yes					
56	WQB8	Yellowstone	02N 24E 08 BBBB	06 24 78	Ditch	no flow	Roadside ditch	5250	16.8	yes					
57	WQB60	Yellowstone	02N 24E 12 BCC	10 13 76	Seep	no flow	Saline seep pond	60900		no					
58	WQB34	Yellowstone	02N 24E 12 DA	10 04 78	Pond	no flow	Standing water 0.5 mile E of Acton	19400		no					
59	WQB81	Yellowstone	02N 24E 16 AAA	10 13 76	Marsh	no flow	Near saline seep	3880		no					
60	WQB64	Yellowstone	02N 24E 17 BAA	10 13 76	Lake	no flow	Small lake in saline seep area	16600		no					

BILLINGS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
61	WQB8	Yellowstone	02N	24E	20	BBCB	08	24	76	Creek		Difficulty Creek	1614	16.8	yes					
62	WQB67	Yellowstone	02N	24E	22	ABB	10	13	76	Marsh	no flow	Seline seep marsh	12900		no					
63	WQB63	Yellowstone	02N	24E	22	CDD	10	13	76	Ditch	no flow	Roadside ditch with salts along edge	16400		no					
64	WQB7	Yellowstone	02N	24E	32	CBB	06	24	76	Creek	0.1 cfs (E)		1989	13.8	yes					
65	WQB18	Yellowstone	02N	25E	07	CCC	06	25	76	Pond	no flow	Acton Pond	45100	19.8	yes					
66	WQB10	Yellowstone	02N	25E	19	CAB	06	24	76	Creek	0.6 cfs (E)	North Fork Fivemile Creek	7290	18.2	yes					
67	WQB52	Yellowstone	02N	26E	13	ODDO	10	12	76	Marsh	no flow	Marshy ditch	2460		no					
68	WQB12	Yellowstone	02N	26E	14	DB	06	25	76	Creek	no flow	First tributary to Twelvemile Creek	2218	11.3	yes					
69	WQB47	Yellowstone	02N	27E	04	AAA	10	12	76	Marsh	no flow	Marshy area at forks of Crooked Creek	5610		no					
70	WQB46	Yellowstone	02N	27E	04	CDO	10	12	76	Ditch	no flow	Roadside ditch	9410		no					
71	WQB51	Yellowstone	02N	27E	05	AAD	10	12	76	Seep	no flow		8760		no					
72	WQB45	Yellowstone	02N	27E	06	CCCC	10	12	76	Canal	no flow	BBWA canal, salts line banks	1880		no					
73	WQB19	Yellowstone	02N	27E	07	AA	04	08	76	Seep	3 gpm (E)	N of Billings	6065	16	yes					
74	WQB44	Yellowstone	02N	27E	08	AAAA	10	12	76	Ditch	no flow	Roadside ditch 2 miles W of Shepherd	36000		no					
75	WQB43	Yellowstone	02N	27E	09	CBB	10	12	76	Seep	no flow	Located 2 miles W of Shepherd	34150	12	yes					
76	WQB53	Yellowstone	02N	27E	31	BAA	10	12	76	Ditch	no flow	Along road in a seep area	8170		no					
77	45M0001	Yellowstone	02N	28E	31	DB	11		45	Well		Located 1.5 miles SE of Huntley			yes	3160			320TSLP	
78	WQB6	Sweet Grass	01N	15E	08	ABB	10	27	76	Creek	0.1 cfs (E)	Otter Creek	590		no					
79	WQB7	Sweet Grass	01N	16E	09	BCC	10	27	76	Creek	6 cfs (E)	Sweet Grass Creek	280		no					
80	WQB20	Stillwater	01N	20E	01	DA	04	28	76	Creek	1 cfs (E)	Toll Creek by power lines	1020		no					
81	WQB33	Stillwater	01N	20E	01	DAD	08	17	76	Creek	1 cfs (E)	Toll Creek 1.8 miles SE of Battle Butte	980		no					
82	WQB35	Stillwater	01N	20E	13	DAA	08	17	76	Creek	1 cfs (E)	Greenwood Creek 3 miles S SE of Battle Butte	840		no					
83	WQB14	Stillwater	01N	21E	02	BC	04	26	76	Seep	no flow	Located 0.25 miles from farm buildings	8800	8.6	yes					
84	WQB43	Stillwater	01N	21E	02	BCB	08	19	76	Seep	no flow	Located 0.6 mile SW of Rattlesnake Ridge	6490	16	yes					
85	WQB13	Stillwater	01N	21E	02	CC	04	26	76	Creek	10 gpm (E)	Bert Creek 0.5 mile S of farm buildings	3680	8	yes					
86	WQB34	Stillwater	01N	21E	06	OCO	08	17	76	Pond	no flow	Greenwood Creek 3 miles SE of Battle Butte	7500		no					
87	WQB21	Stillwater	01N	21E	07	AB	04	26	76	Creek	0.6 cfs (E)	Greenwood Creek 0.6 mile E of intersection	2360		no					
88	WQB22	Stillwater	01N	21E	08	AA	04	26	76	Seep	no flow	Located 0.9 mile E of farm buildings	7770	8	yes					
89	WQB23	Stillwater	01N	21E	10	AB	04	26	76	Creek	10 gpm (E)	Hopex Creek at culvert	3347	12	yes					
90	WQB24	Stillwater	01N	21E	11	OC	04	26	76	Seep	no flow	Located 0.7 mile W of Intersection	4960		no					

BILLINGS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

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91	WQB36	Stillwater	01N 21E 17 CCD	08 18 76	Creek	no flow	Unnamed creek 1.5 miles S of Big Lake	2293	20	yes					
92	WQB12	Stillwater	01N 21E 15 DDD	04 28 76	Seep	no flow	Located 0.25 mile N of farm buildings	1840		no					
93	39M0001	Stillwater	01N 21E 24 CC	05 18 39	Well	0.1 gpm	Located 1.5 miles SW of Hunter Lake			yes	4340			217LKOT	
94	WQB37	Stillwater	01N 22E 07 CA	08 18 76	Pond	no flow	Located 0.5 mile N of Hunter Lake	28270	18	yes					
95	WQB39	Stillwater	01N 22E 17 D	08 18 76	Lake	no flow	Located 1.8 miles E of Hunter Lake	12780	19	yes					
96	WQB38	Stillwater	01N 22E 18	08 18 78	Lake	no flow	Hunter Lake I mile S of Big Lake	18560	17	yes					
97	WQB40	Stillwater	01N 22E 33 BAC	08 18 76	Pond	no flow	On unnamed creek 3 miles SE of Hunter Lake	2400		no					
98	WQB6	Yellowstone	01N 23E 03 DDD	06 24 76	Creek	1 cfs (E)	Unnamed creek	4507	12	yes					
99	WQB5	Yellowstone	01N 23E 05 DDD	06 24 76	Creek	1 cfs (E)	Crail Creek	4247	13.2	yes					
100	WQB4	Yellowstone	01N 23E 06 BC	06 24 76	Creek	2 cfs (E)	Carle Creek	1627	12.8	yes					
101	WQB3	Yellowstone	01N 23E 08 DD	06 24 76	Creek	1 cfs (E)		1738	11	yes					
102	WQB11	Yellowstone	01N 24E 15 DCA	06 24 76	Creek	1.5 cfs (E)	Cove Creek	3628	21.5	yes					
103	67M0006	Yellowstone	01N 28E 01 BAC	03 21 57	Well		Located 6.5 miles S of Worden	3090		yes	3570			331MDSN	
104	67M0007	Yellowstone	01N 28E 01 BACC	03 25 57	Well		Located 6.5 miles S of Worden	3000		yes	3570			337MSNC	
105	WQB25	Stillwater	01S 18E 01 DA	08 16 76	Seep	2 cfs (E)	Near White Beaver Creek	600		no					
106	WQB1	Yellowstone	01S 24E 06 CAC	06 24 78	Creek	10 cfs (E)	Canyon Creek at bridge	3062	11.8	yes					
107	WQB2	Yellowstone	01S 24E 06 BBB	06 24 76	Creek	1 cfs (E)	North Fork Canyon Creek	4298	11	yes					
108	WQB69	Yellowstone	01S 24E 11 BB	10 12 76	Seep	no flow	Saline seep	9950		no					
109	WQB68	Yellowstone	01S 24E 11 CBB	10 13 76	Creek	0.5 cfs (E)	Canyon Creek at road	4030		no					
110	WQB67	Yellowstone	01S 24E 22 CB	10 13 78	Creek	no flow	Very small creek	24200		no					
111	WQB66	Yellowstone	01S 24E 32 DDDD	10 13 76	Creek	<1 gpm (E)	Small creek through saline seep area	14600		no					
112	not on map														
113	WQB27	Stillwater	02S 21E 08 DAA	08 17 76	Creek	0.5 cfs (E)	Tom Creek 3.2 miles W of Horse Butte	5300		no					
114	WQB55	Stillwater	02S 23E 20 CDB	11 04 76	Ditch	40 cfs (E)	Big Ditch just N of Park City	300		no					
115	41M0001	Yellowstone	02S 26E 07 DA	07 31 41	Well	1.5 gpm (M)	Located 9 miles SW of Billings			yes	3680			217LKOT	
116	44M0004	Yellowstone	02S 29E 17 BC	06 12 44	Well					yes	3710			331MDSN	
117	WQB54	Stillwater	03S 18E 33 DCD	11 04 76	Creek	1.5 cfs (E)	Groove Creek at highway bridge near Absarokee	210		no					
118	WQB53	Stillwater	03S 18E 36 BCC	11 04 76	Creek	0.1 cfs (E)	Natural drain of swampy area across river from Absarokee	440		no					
119	WQB52	Stillwater	03S 18E 36 DCC	11 04 78	Creek	140 cfs (E)	Rosebud Creek at bridge near Absarokee	100		no					
120	WQB50	Stillwater	03S 18E 13 CCA	11 04 76	Creek	1 cfs (E)	Whitebird Creek at highway bridge	380		no					

BILLINGS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
121	WQ851	Stillwater	03S 19E 29 CDD	11 04 76	Creek	0.6 cfs (E)	Beaver Creek at highway bridge	630		no					
122	WQ849	Stillwater	03S 20E 07 ABC	11 04 76	Ditch	2 cfs (E)	Drainage ditch through 40 acre pasture	670		no					
123	WQ810	Carbon	04S 22E 19 ACC	10 15 76	Seep	no flow		890		no					Ellis
124	60M0006	Carbon	04S 23E 02 ABA	11 23 60	Well		Located 4 miles N of Edgar	3230		yes	3440			217LKOT	
125	57M0004	Carbon	04S 23E 08 AA	03 25 57	Well		Located 4 miles NW of Edgar	2780		yes	3580			211FRNR	
126	57M0012	Carbon	04S 23E 08 AA	03 25 57	Well		Located 4 miles NW of Edgar	3360		yes	3680			331MDSN	
127	WQB9	Carbon	04S 23E 25 AAA	10 14 76	Pond	no flow	Marsh area in saline seep	7980		no					
128	WQ812	Carbon	04S 23E 29 BC	10 15 76	Pond	no flow	Adjacent to seep area	4020		no					
129	WQ813	Carbon	04S 23E 32 DCD	10 15 76	Creek	1 cfs (E)	Creek through seep area	2160		no					
130	WQ811	Carbon	05S 22E 03 BD	10 15 76	Seep	< 1 gpm (E)	Saline seep area	7080		no					
131	WQB8	Carbon	05S 23E 11 CCC	10 14 78	Marsh	no flow	Marsh area along small seep	4260		no					
132	76W2660	Carbon	05S 24E 04 AB	10 31 76	Creek		North Fork Fivemile Creek downstream from Edgar	708	8	yes					
133	76W2659	Carbon	05S 24E 26 AB	10 31 78	Creek		North Fork Fivemile Creek upstream from Edgar	588	5	yes					
134	44M0005	Carbon	06S 18E 04 BD	10 02 44	Well		Located 1.5 miles W of Roscoe			yes	5130			331MDSN	
135	WQB7	Carbon	06S 23E 04 BA	10 14 78	Seep	no flow	Saline seep	4240		no					
136	WQB6	Carbon	06S 23E 22 AC	10 14 78	Marsh	no flow	Marsh in a seep area	2580		no					
137	76W2658	Carbon	06S 23E 33 CD	10 31 76	River		Clarks Fork River downstream from Bridger	1109	9	yes					
138	60M0009	Carbon	06S 24E 04 DD	03 31 60	Well		Located 11 miles SW of Edgar			yes	4200			320TSLP	
139	76W2665	Carbon	07S 21E 10 DA	10 31 76	Creek		North Fork Dry Creek upstream from Bridger	696	6.6	yes					
140	51M0002	Carbon	07S 22E 07 BB	08 08 51	Well		Located 10 miles NW of Belfry			yes	4150			320TSLP	
141	76W2656	Carbon	07S 22E 18 CD	10 31 78	Creek		North Fork Dry Creek downstream from Bridger	662	8.5	yes					
142	WQ814	Carbon	07S 22E 26 DB	06 06 76	Canal		Near Clarks Fork River near Belfry	129		yes					
143	WQB4	Carbon	07S 23E 03 CC	10 14 78	Seep	no flow	Saline seep area	5890		no					
144	WQB5	Carbon	07S 23E 05 AAA	10 14 78	Ditch	no flow	Irrigation ditch	2480		no					
145	WQB3	Carbon	07S 23E 23 CA	10 14 76	Pond	no flow	Pond in a saline seep	22100		no					
146	76M0932	Carbon	08S 20E 30 DAAB	07 28 76	Well	9 gpm (M)	Sheridan Campground well number 2	89	3	yes	6280				
147	76W2657	Carbon	08S 22E 28 DB	10 31 78	River		Clarks Fork River near Belfry (upstream)	437	8.6	yes					
148	WQB1	Carbon	09S 25E 04 BB	10 14 76	Pond	no flow	Marsh in saline seep area	760		no					
149	WQB2	Carbon	09S 26E 09 DD	10 14 76	Pond	no flow	Large pond in marsh by saline seep area	960		no					

Chemical Analyses

Map ref. no.	T	E	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
2	03N	20E	33		08	17	76	Lake	79	596	3080	18				733	26	570	7520
3	03N	20E	36	AA	04	21	76	Creek	309	741	2500	13				604		252	8250
5	03N	21E	33	DBA	08	19	76	Lake	60	243	1400	21				153	54	190	3660
6	03N	22E	20	DCD	08	19	76	Creek	12.8	1807	2620	29				398		430	11600
11	03N	24E	20	CA	06	25	76	Pond	62	25.8	125	11.4				259		34.9	279
14	03N	24E	35	BC	04	09	76	Creek	107	143	570	5.5				463	5	80	1540
15	03N	27E	19	CC	04	08	76	Ditch	455	1922	4000	23.4				343	31	46	16200
19	03N	28E	31	BC	04	08	76	Creek	329	320	1100	12.5				415		36	4020
23	02N	15E	23	BB	11		32	Well			860*					1580		87	16
24	02N	15E	23	BB				Well	150	45	3600*					340		5800	22
25	02N	19E	13	ADB	08	16	76	Seep	368	1507	5480	15				442		510	17200
26	02N	19E	24	BA	08	17	76	Pond	493	654	770	13				335		208	4840
27	02N	20E	04	CA	11	25	60	Well	10	2	760*					830	59	630	13
33	02N	20E	29	BB	12		56	Well	340	84	400*					196		110	1700
37	02N	21E	11	DD	04	21	76	Seep	353	427	1130	6				340		260	4250
38	02N	21E	23	DDD	08	18	76	Lake	50	225	1035	18				147	53	185	2750
39	02N	21E	24	BCC	08	18	76	Creek	24.8	285	945	12				197	84	150	2680
40	02N	21E	27	DB	01	30	67	Well	290	85	10000	40				769		16000	
41	02N	21E	27	DB	10	26	66	Well	370	34	9800	25				1010		15000	10
42	02N	21E	31	AA	04	22	76	Creek	132	144	336	3.4				420		45	1180
43	02N	21E	31	BBB	04	22	76	Seep	411	905	2750	10				626		290	9400
44	02N	21E	31	CB	04	22	76	Well	152	33	2400	5.2				317		27	5150
45	02N	21E	31	CD	08	19	76	Well	56	20.3	290	5.4				506		13	420
46	02N	21E	21	CD	04	22	76	Well	431	771	1995	4.8				970		441	6850
47	02N	21E	34	DB	02	05	58	Well	31	12	630*					1050		450	
48	02N	22E	15	BCC	08	18	76	Creek	373	1112	2080	24				690		500	8750
49	02N	22E	19	ACD	08	20	76	Seep	596	737	1880	41				372		735	7110
52	02N	23E	21	AC	04	09	76	Ditch	317	656	2500	25				743		516	7250
55	02N	24E	02	CA	04	09	76	Pond	458	1481	2960	24.3				162	115	84	13000
56	02N	24E	08	BBBB	06	24	76	Ditch	148	189	818	17				488		209	2180
61	02N	24E	20	BBCB	06	24	76	Creek	75	94	125	4.9				340		41	496
64	02N	24E	32	CBB	06	24	76	Creek	119	71	193	4.9				431		77	496
65	02N	25E	07	CCC	06	25	76	Pond	389	6735	9310	28				607	316	38.2	50400
66	02N	25E	19	CAB	06	24	76	Creek	351	506	950	10				356		66	4400
68	02N	26E	14	DB	06	25	76	Creek	70	31.5	864	4.4				738		34.3	1480
73	02N	27E	07	AA	04	08	76	Seep	368	164	775	7.8				368		38	2820
75	02N	27E	09	CBB	10	12	76	Seep	411	3491	8110	49				1285		260	29200
77	02N	28E	31	DB	11		45	Well	53	20	890*					230		57	1800
83	01N	21E	02	BC	04	22	76	Seep	281	646	1150	12				487		313	4900
84	01N	21E	02	BCB	08	19	76	Seep	297	458	1000	11				438		275	3950
85	01N	21E	02	CC	04	22	76	Creek	285	211	328	3.7				272		68	1830
88	01N	21E	08	AA	04	22	76	Seep	365	607	965	15				406		145	4800
89	01N	21E	10	AB	04	22	76	Creek	266	193	340	4.6				375		64	1756
91	01N	21E	12	CCD	08	18	76	Creek	32.9	65	397	6.9				766	13	79	450
93	01N	21E	24	CC	05	18	39	Well			2300*					1710	58	2400	23

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
2	<.1		8.4	21	12370	12250	2650	645	26.0	WQB			No	76W1679
3	.25		8.07	17	12000	12670	3820	498	17.6	WQB			No	76W0657
5	.01		8.9	19	6490	5690	1150	216	18.0	WQB			No	76W1887
6	<.1		8.0	19	12750	16720	7470	326	13.2	WQB			Yes	76W1886
11	.02		7.46	16.8	1123	666	261	212	3.4	WQB			Yes	76W1224
14	.03		8.33	18	3486	3914	857	388	8.5	WQB			Yes	76W0674
15	130		8.57	17	16000	23150	9050	333	18.3	WQB			No	76W0567
19	.6		8.19	20	6767		2140	340	10.3	WQB			No	76W0568
23								1300		Unknown		211FRNR	No	32M0002
24							560	279		Unknown		211CLRD	No	00M0011
25	.06		8.11	23	20390	25300	7120	362	28.3	WQB			Yes	76W1876
26	.01		8.1		7210	7144	3920	275	5.3	WQB			No	76W1677
27			8.7				33	779		Unknown		211EGLE	No	60M0002
33							1190	160		Unknown		331MDSN	No	56M0010
37	.06		7.85	11	8500		2640	279	9.6	WQB			No	76W0660
38	.03		9.3	17	5290	4382	1060	210	13.9	WQB			Yes	76W1885
39	.02		9.2	22	5519	4273	1240	302	11.7	WQB			No	76W1883
40			7.90				1070	631	132	Unknown		211FRNR	No	67M0001
41			7.8			25740	1060	828	131	Unknown		211FRNR	No	66M0025
42	.28		8.01		2949	2261	923	346	4.8	WQB			No	76W0663
43	2		8.01	11.5	13500	14390	4750	514	17.4	WQB			No	76W0664
44	<.01		7.28	9	9400	8099	516	260	46.0	WQB			No	76W0666
46	.03	.67	7.8	11	1690	1064	222	415	8.5	WQB			No	76W1890
46	14		7.88	9	12100	11480	4250	796	13.3	WQB			No	76W0665
47			7.0				127	861		Unknown		211FRNR	No	58M0002
48	93	.26	8.0	21	12990	10720	5510	484	12.2	WQB			No	76W1888
49	<.1	.18	7.3	17	10760	9264	4620	306	12.2	WQB			Yes	76W1889
62			7.33	16	10700	12010	3490	610	16.4	WQB			No	76W0566
66	1		9.43	12	13800	18290	7240	325	16.1	WQB			No	76W0569
56	.27	.15	7.9	16.8	5250	3806	1150	400	10.5	WQB			Yes	76W1216
61	.49	.28	6.1	15.8	1614	886	576	279	2.3	WQB			Yes	76W1215
64	9.3	.41	7.95	13.8	1929	1102	590	354	3.5	WQB			Yes	76W1214
65	.03	.83	6.9	19.8	45150	53260	28700	1030	23.9	WQB			Yes	76W1225
66	3.8	.39	8.06	18.2	7290	6460	2960	292	7.6	WQB			Yes	76W1217
68	.06	.56	7.86	11.3		2840	305	605	21.5	WQB			Yes	76W1219
73	.3		7.96	15	5065		1590	302	8.6	WQB			No	76W0566
75	.3		7.9	12	34160	43150	15400	1050	31.9	WQB			Yes	76W2544
77							215	189		Unknown		320TSLP	No	45M0001
83	.29		7.82	9.5	8800	7789	3360	400	8.6	WQB			No	76W0662
84	.69	.32	8.0	16	6490	6208	2620	360	8.5	WQB			No	76W1884
85	.82		8.0	8	3098	3580	1580	306	3.6	WQB			No	76W0661
88	.21		8.17	8	7303	7770	3410	333	7.2	WQB			No	76W0667
89	.88		8.07	12	3347	2999	1460	307	3.9	WQB			No	76W0668
91	.07		8.3	20	2293	1421	350	649	9.2	WQB			No	76W1878
93								1501		Unknown		217LKOT	No	39M0001

Chemical Analyses

Map ref. no.	Location T	R	Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
94	01N	22E	07 CA	08	18	76	Pond	389	2995	7420	13				77	108	1500	23860
95	01N	22E	17 D	08	18	76	Lake	37.4	348	3424	8.3				833	146	648	6888
96	01N	22E	18	08	18	76	Lake	352	543	5467	16				427		1620	12500
98	01N	23E	03 DDD	06	24	76	Creek		378	539	6				469		62	2140
99	01N	23E	05 DDD	06	24	76	Creek	204	177	581	8.7				395		126	1950
100	01N	23E	06 BC	08	24	76	Creek	71	84	168	5				476		62	394
101	01N	23E	06 DD	06	24	76	Creek	100	81	160	2.6				548		66	349
102	01N	24E	15 DCA	06	24	76	Creek	190	209	414	10				259		45.1	1900
103	01N	28E	01 BAC	03	21	57	Well	380	99	380*					370		44	1800
104	01N	28E	01 BACC	03	25	57	Well	520	150	110*							52	1600
106	01S	24E	05 CAC	08	24	76	Creek	118	103	442	7.3				356		83	1240
107	01S	24E	06 BBB	06	24	76	Creek	275	235	498	11				209		70	2346
115	02S	28E	07 DA	07	31	41	Well			1100*					2200	120	260	48
116	02S	29E	17 BC	09	12	44	Well	600	150	410*					170		120	2800
124	04S	23E	02 ABA	11	23	60	Well	21	6	890*					2000	133	79	30
125	04S	23E	08 AA	03	25	57	Well			750*					1620	109	90	
128	04S	23E	08 AA	03	25	57	Well	690	230	46*					255		100	2300
132	05S	24E	04 AB	10	31	76	Creek	46.5	30.1	57	3.5				287		7.6	115
133	05S	24E	25 AB	10	31	76	Creek	56	28.1	20	2.6				299		4.3	46
134	06S	18E	04 BD	10	02	44	Well	560	150	77*					45		18	2100
137	06S	23E	33 CD	10	31	76	River	128	41.5	63	4				195		5.4	435
138	06S	24E	04 DD	03	31	60	Well	260	39	1.7	.8				233		.5	620
139	07S	21E	10 DA	10	31	76	Creek	57	13.9	.7	3				329		2.4	100
140	07S	22E	07 BB	08	08	51	Well	440	86	110*					256		51	1400
141	07S	22E	16 CD	10	31	76	Creek	32.7	14.2	97	3				183		11	185
142	07S	22E	26 DB	06	06	76	Canal	15.8	4.8	3.5					59		.3	12.3
146	08S	20E	30 DAAB	09	02	76	Well	11.4	2.48	1.8	1.1	.05	.01	7.1	42		.8	6.8
147	08S	22E	26 DB	10	31	76	River	53	16.5	19	2.6				207		2.7	71

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters (Con't.)

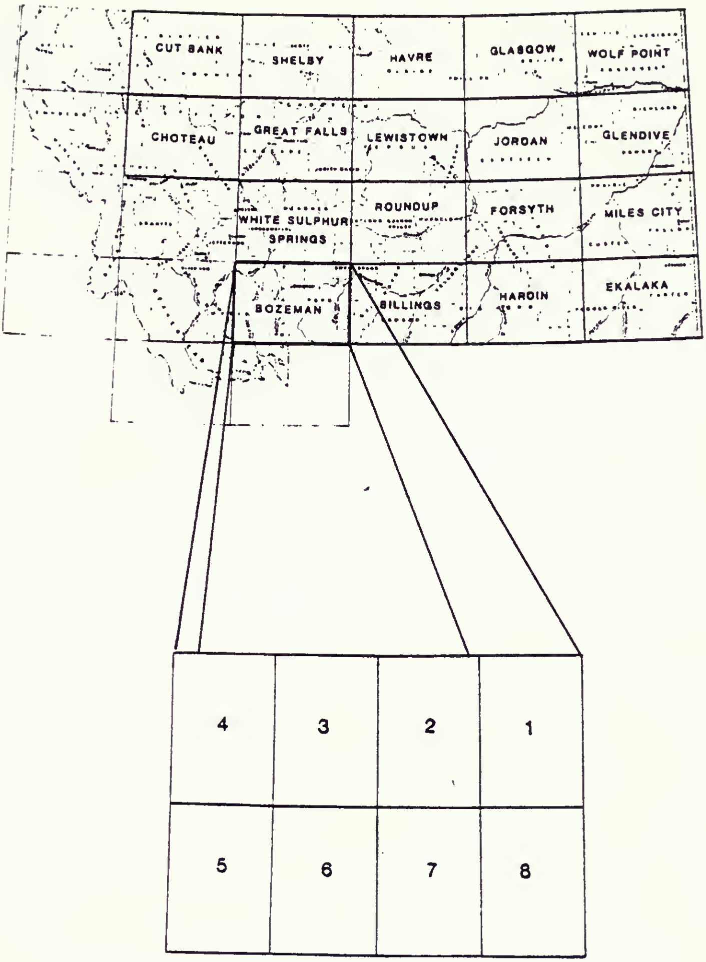
Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
94	<.1		9.4	16	28270	36320	13300	243	28.0	WQB			Yes	76W1880
95	<.1		9.1	19	12780	11910	1520	928	38.2	WQB			Yes	76W1882
96	<.1		7.9	17	18560	20710	3110	350	42.6	WQB			Yes	76W1881
98	19.4	.27	7.75	12	4507	3375	1560	385	5.9	WQB			Yes	76W1213
99	.78	.16	7.8	13.2	4247	3254	1240	324	7.3	WQB			Yes	76W1212
100	1.8	.53	8.2	12.8	1627	1020	520	391	3.2	WQB			Yes	76W1211
101	6.5	.95	8.15	11	1738	1036	585	449	2.9	WQB			Yes	76W1210
102	.39	.43	8.05	21.5	3628	2897	1340	212	4.9	WQB			Yes	76W1218
103			7.4				1360	303		Unknown		331MDSN	No	57M0006
104			6.8				1920			Unknown		337MSNC	No	57M0007
106	1.9	..64	8.2	11.8	3052	2171	720	292	7.2	WQB			Yes	76W1208
107	2.8	.31	8.1	11	4298	3541	1660	171	5.3	WQB			Yes	76W1209
115								2000		Unknown		217LKOT	No	41M0001
116							2120	139		Unknown		331MDSN	No	44M0004
124			8.6				77	1860		Unknown		217LKOT	No	60M0006
125			8.0					1510		Unknown		211FRNR	No	57M0004
126			7.2				2670	209		Unknown		331MDSN	No	57M0012
132	2.8	.65	8.2	8	708	404	240	235		WQB			No	76W2660
133	.01	.23	8.1	5	589	306	260	245	0.5	WQB			No	76W2659
134							2020	37		Unknown		331MDSN	No	44M0006
137	.22	.61	7.9	9	1109	773	490	160	1.2	WQB			No	76W2656
138			7.2				810	191		Unknown			No	60M0009
139	.13	.39	8.1	6.5	696	416	200	270	2.4	WQB			No	76W2655
140							1450	210		Unknown		320TSLP	No	51M0002
141	.15	.18	8	6.5	652	433	140	150	3.6	WQB			No	76W2656
142			7.4		129	95	59	48	0.2	WQB			No	76W1027
146	.117	<.1	7.01	3	83	51	39	35	0.1	USFS			Yes	76M0932
147	.33	.18	8.2	8.5	437	266	195	170	0.6	WQB			No	76W2667

BILLINGS 1° x 2° Sheet

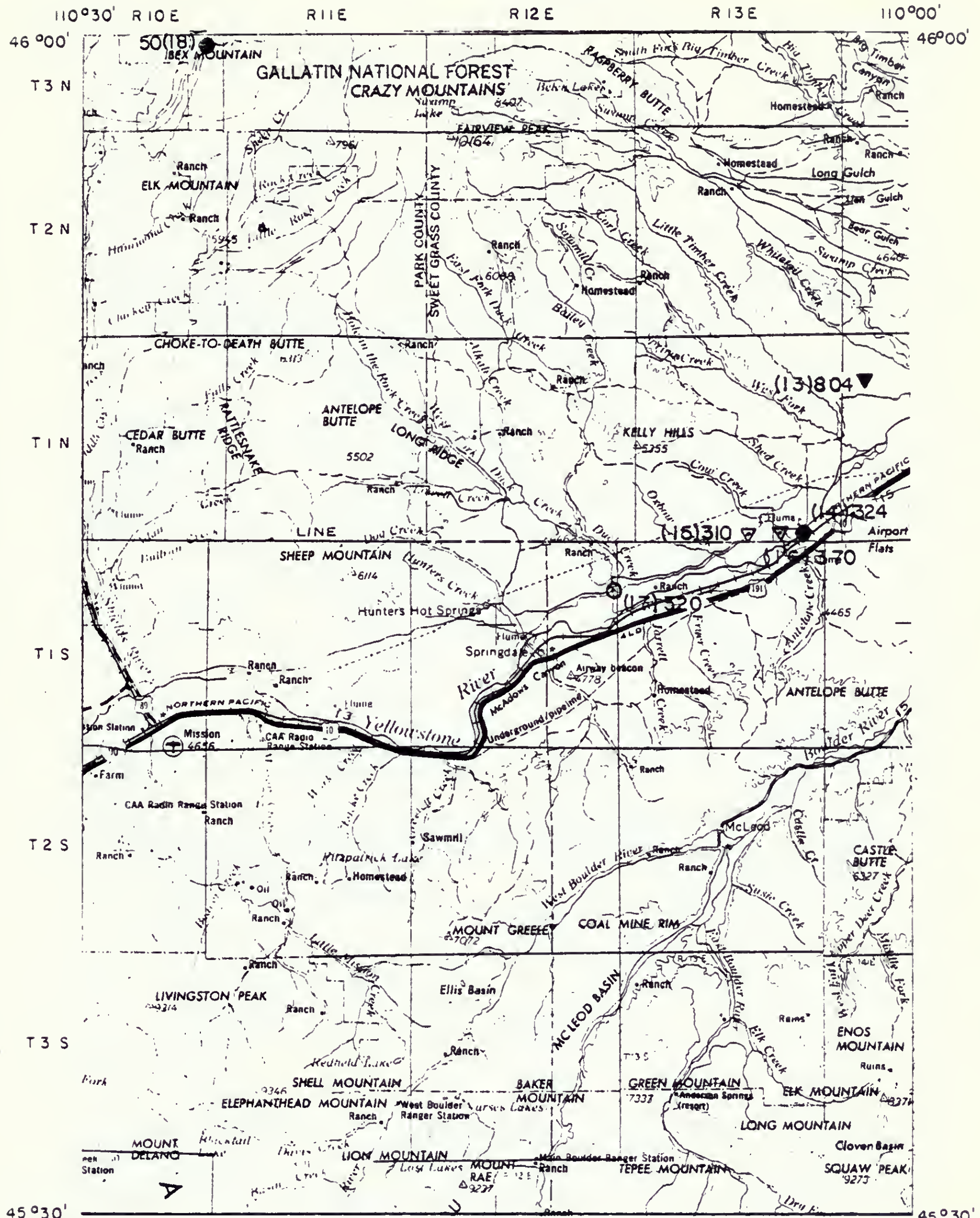
Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
6	03N 22E 20 DCD			<1	<10	.9	<.005	.05	.01	<.05	.47	<.2	.12		8				<.01	76W1886
11	03N 24E 20 CA			8	<10	.11	<.001	<.05	<.01	<.05	.02	<.2	<.05		<1				<.01	76W1224
14	03N 24E 35 BC						<.001		.02	.08									<.01	76W0574
25	02N 19E 13 ADB			9	<10		<.005	.05	<.01	<.05	.40	<.2	.19		<1				<.01	76W1876
38	02N 21E 23 DDD			1	<10	62	<.005	<.05	<.01	<.05	.09	<.2	<.05		<1				<.01	
49	02N 22E 19 ACD			<1	<10	2.1	<.005	<.05	.01	<.05	.20	<.2	.05		<1				.03	76W1889
56	02N 24E 09 BBB			5	<10	.68	.007	<.05	.01	<.05	.07	<.2	.07		<1				<.01	76W1216
61	02N 24E 20 BBCB			2	<10	.21	<.001	<.05	<.01	<.05	.03	<.2	<.05		<1				<.01	76W1215
64	02N 24E 32 CBB			1	<10	.23	<.001	<.05	<.01	<.05	.03	<.2	<.05		17				<.01	76W1214
65	02N 25E 07 CCC			2	<10	.35	.11	.30	.26	<.05	.56	<.2	.67		16				<.01	76W1225
66	02N 25E 19 CAB			2	<10	.50	.013	<.05	.02	<.05	.14	<.2	.11		21				<.01	76W1217
68	02N 26E 14 DB			3	<10	.69	.003	<.05	<.01	<.05	.08	<.2	<.05		<1				<.01	76W1219
75	02N 27E 09 CBB			<1			<.005		.03	<.05			.31			.10	9.3		<.01	76W2544
94	01N 22E 07 CA			19	10		<.005	.1	.02	<.05	.37	.7	.21		<1				<.01	76W1880
95	01N 22E 17 D			20	<10		<.005	<.05	<.01	<.05	.05	<.2	.08		1				<.01	76W1882
96	01N 22E 18			16	<10		<.005	<.05	<.01	<.05	.09	.8	.15		<1				<.01	76W1881
98	01N 23E 03 DDD			2	<10	.41	.007	<.05	.01	<.05	.07	<.2	.05		8				<.01	76W1213
99	01N 23E 05 DDD			2	<10	.36	.003	<.05	<.01	<.05	.05	2.8	<.05		<1				<.01	76W1212
100	01N 23E 08 BC			3	<10	.24	<.001	<.05	<.01	<.05	.03	<.2	<.05		6				<.01	76W1211
101	01N 23E 08 DD			2	<10	.29	.001	<.05	<.01	<.05	.03	1	<.05		6				<.01	76W1210
102	01N 24E 15 DCA			3	<10	.5	.003	<.05	<.01	<.05	.11	<.2	<.05		3				<.01	76W1218
106	01S 24E 05 CAC			5	<10	.37	.005	<.05	<.01	<.05	.04	<.2	<.05		14				<.01	76W1208
107	01S 24E 06 BBB			2	<10	.27	.010	<.05	<.01	<.05	.12	<.2	<.05		21				<.01	76W1209
146	08S 20E 30 DAAB	<.05		<2.0			<.01		<.01	<.05									.19	76M0932

LOCATION BASE MAP



BOZEMAN 1° x 2° SHEET



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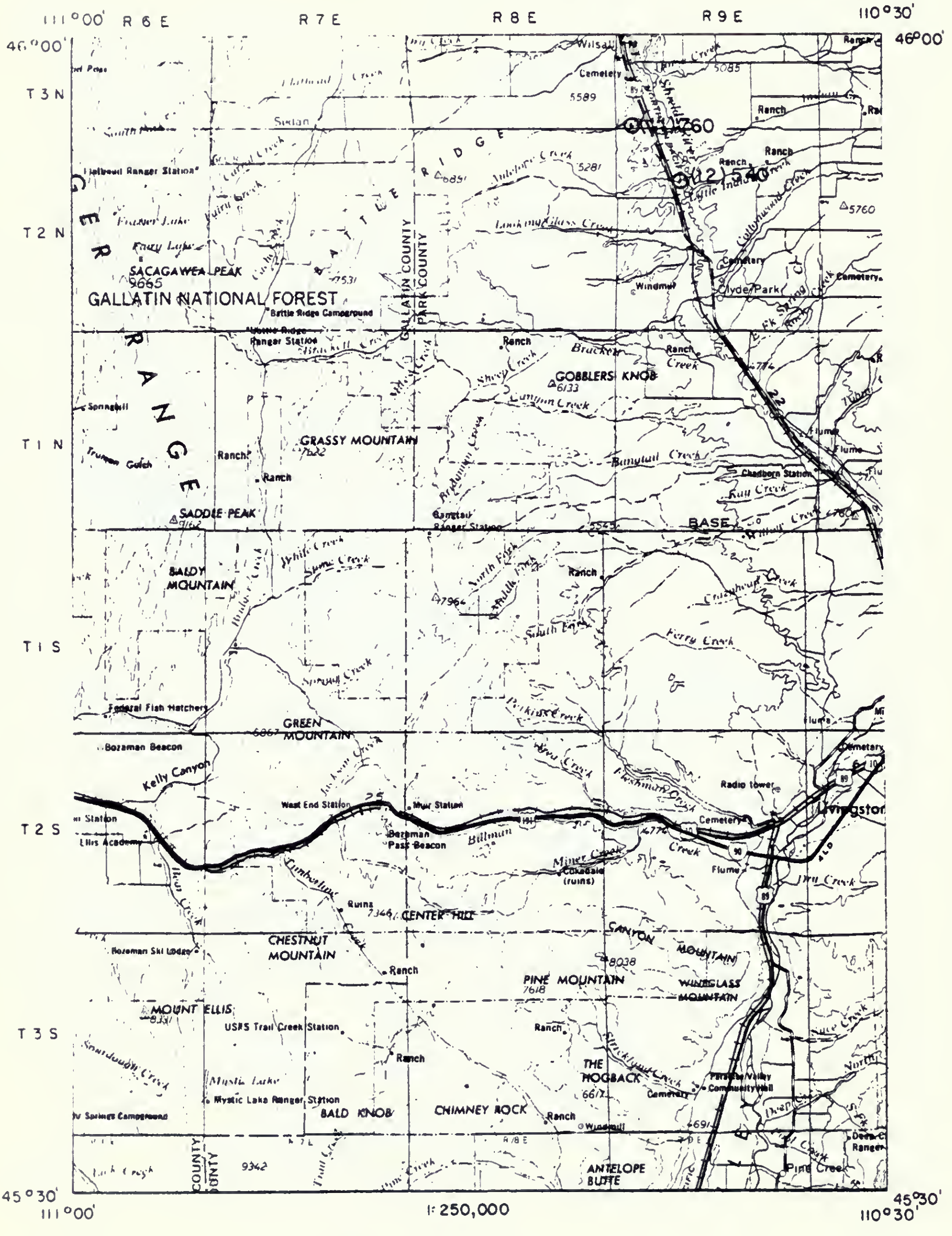
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

BOZEMAN 2



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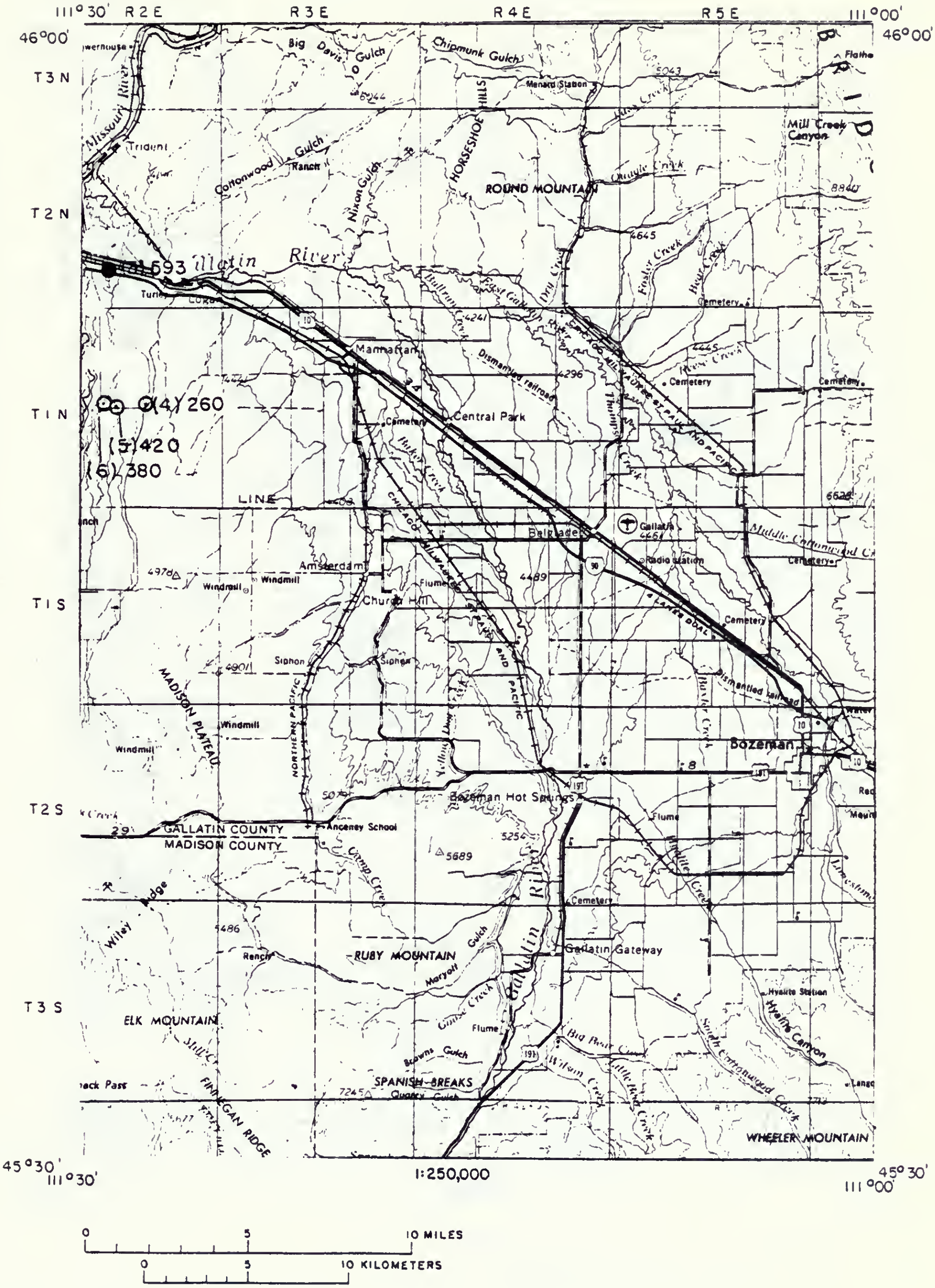
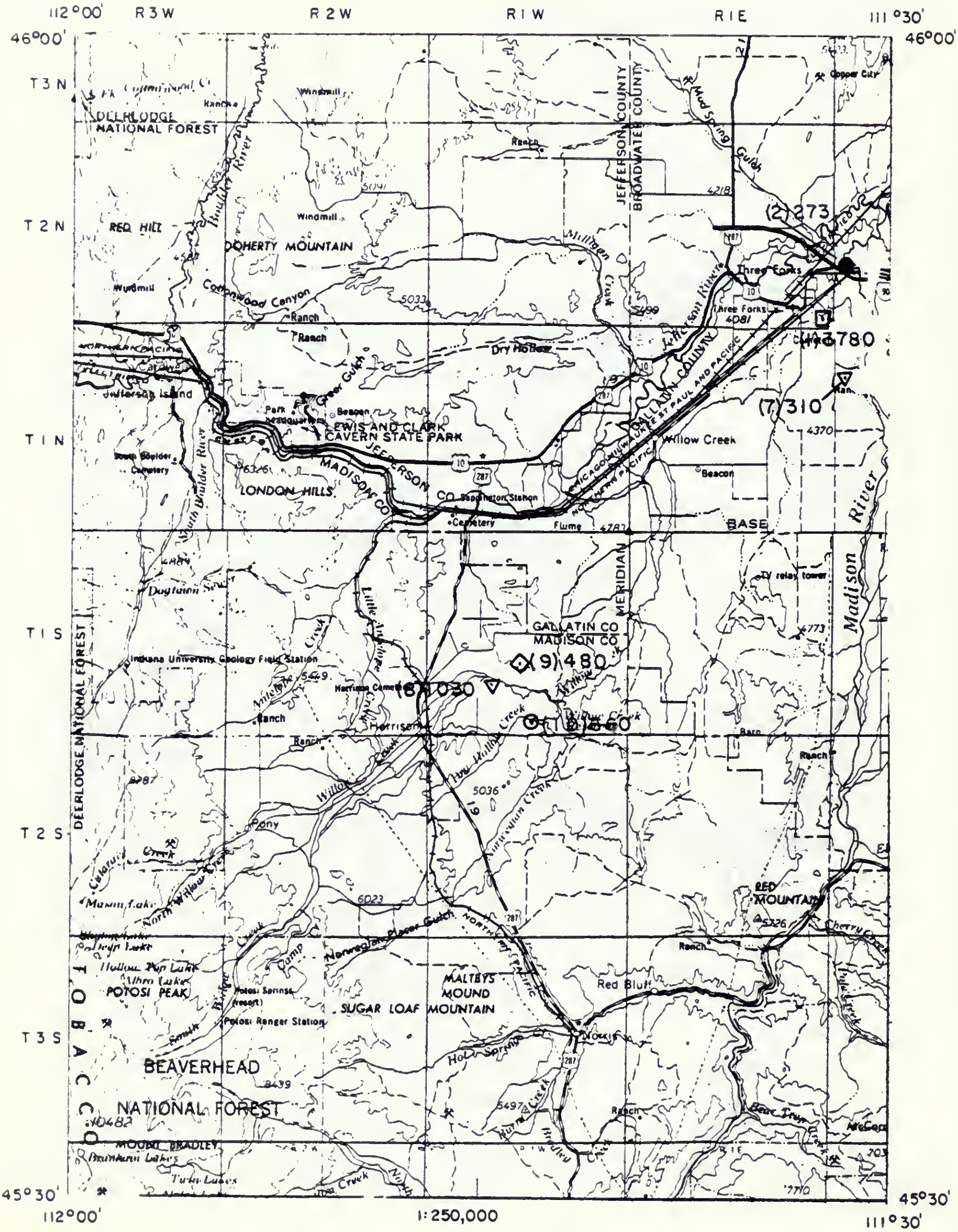
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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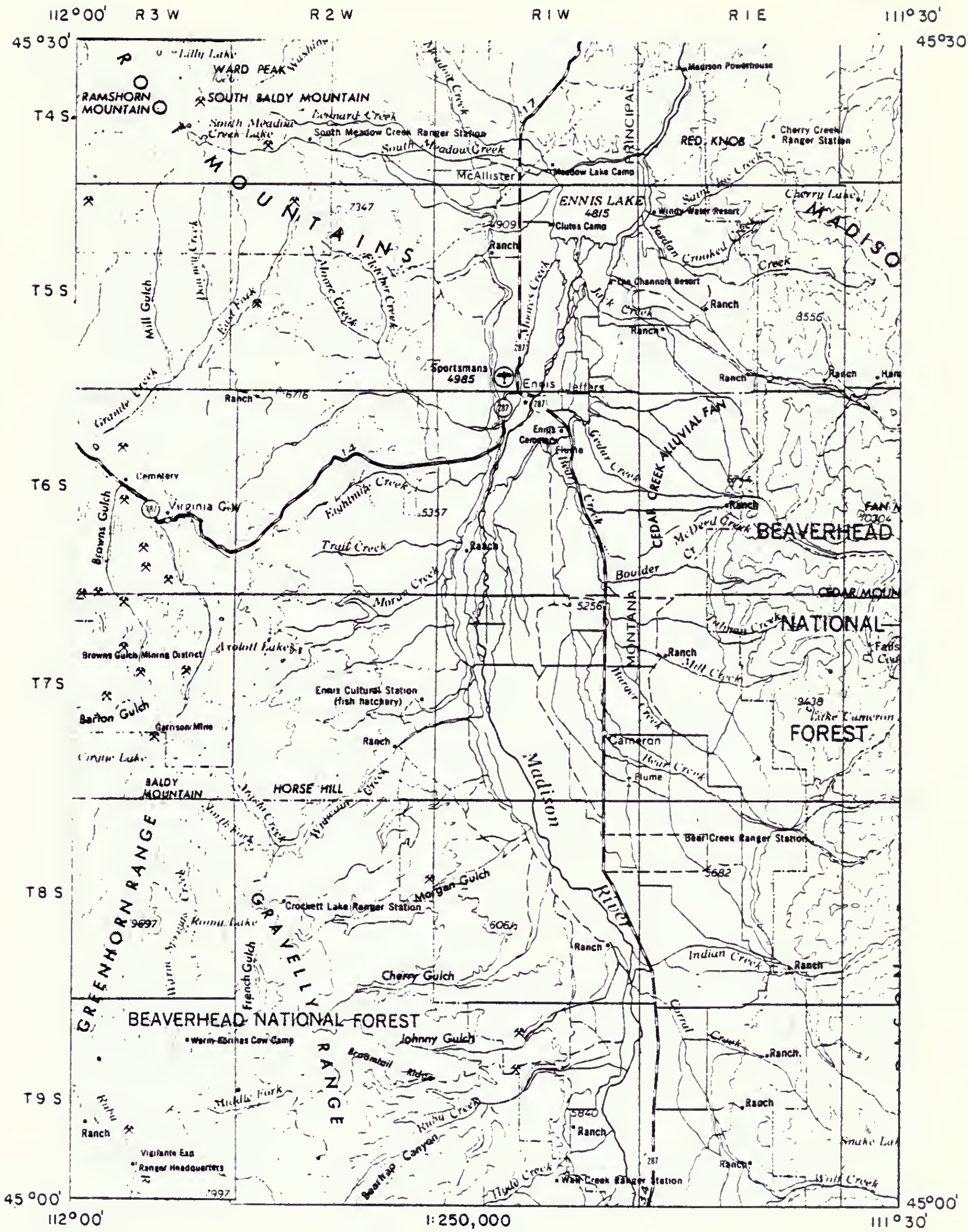
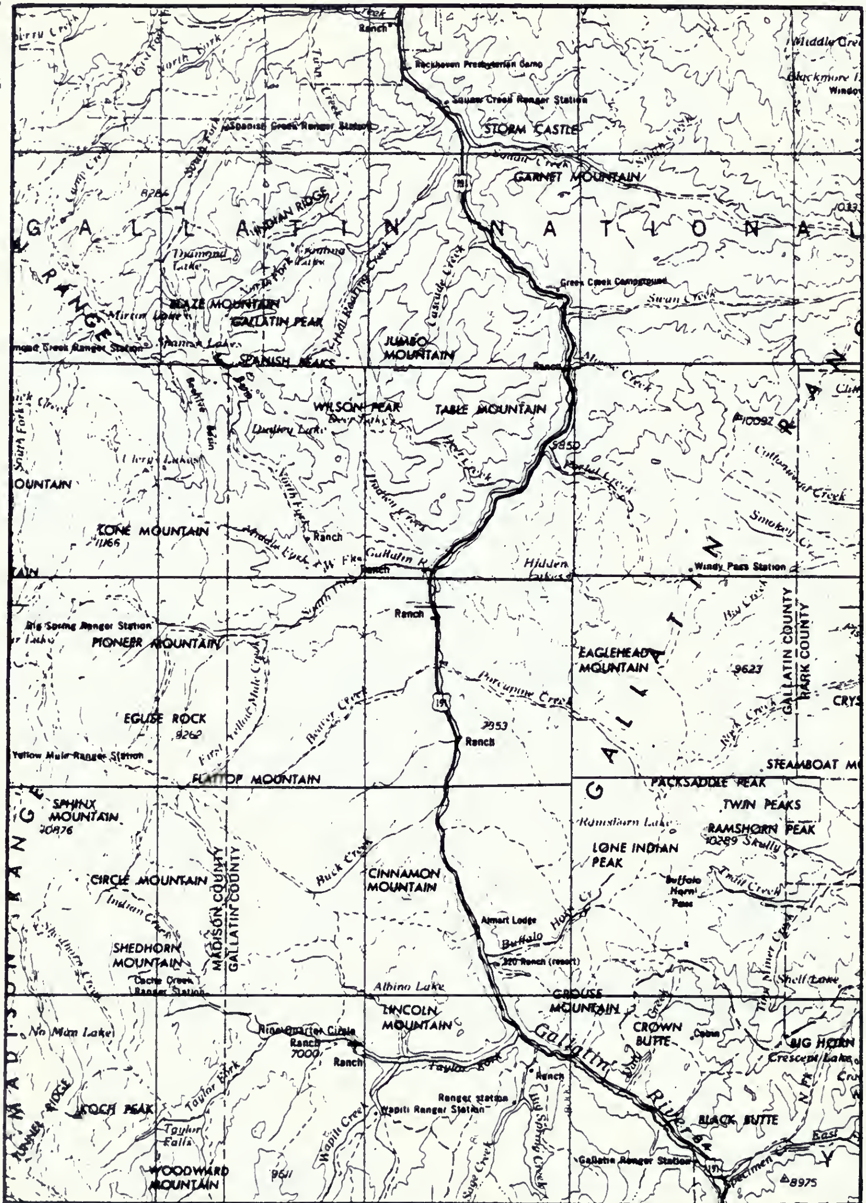
CONTOUR INTERVAL 100 FT



MILES

CONTOUR INTERVAL



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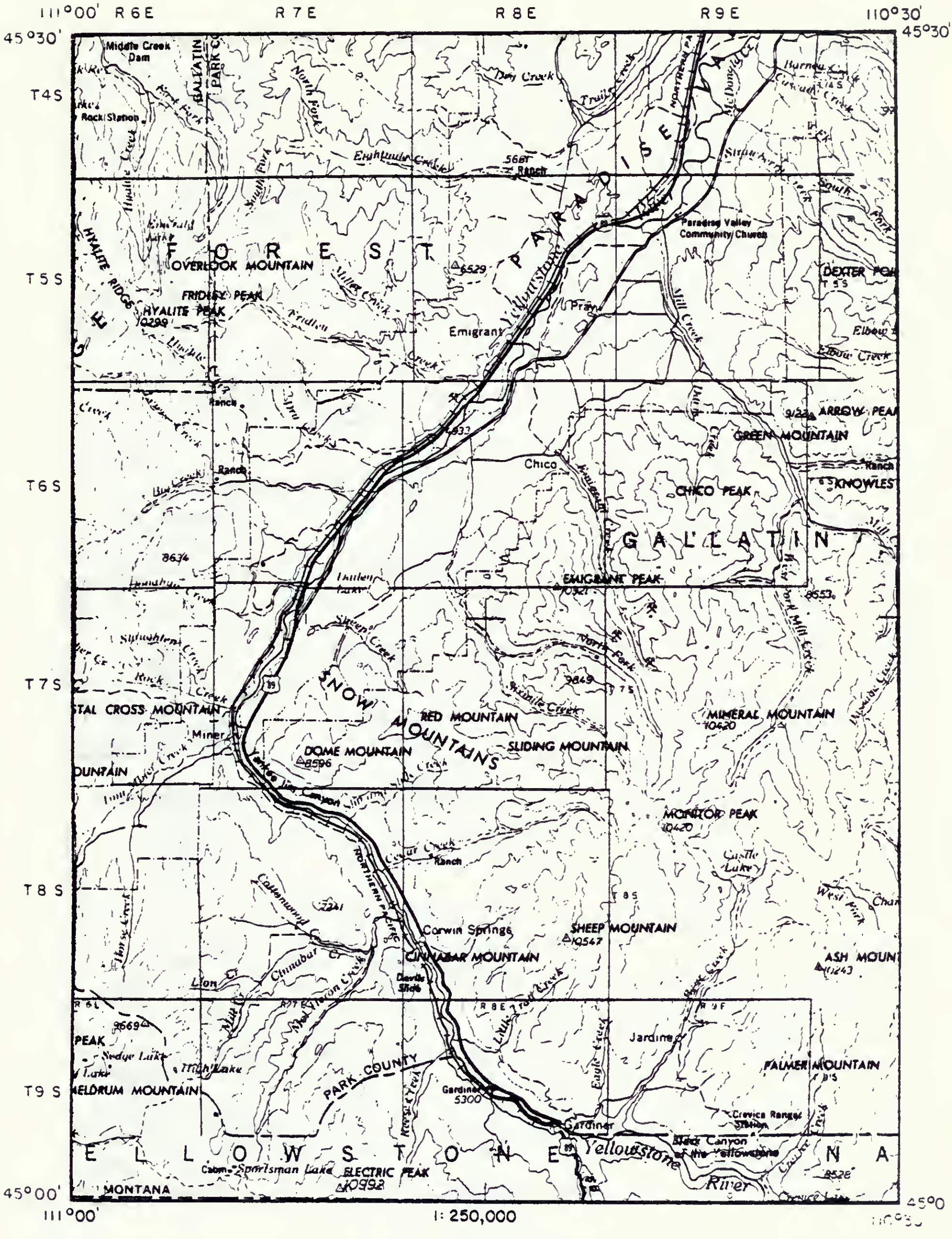
CONTOUR INTERVAL 100 FT



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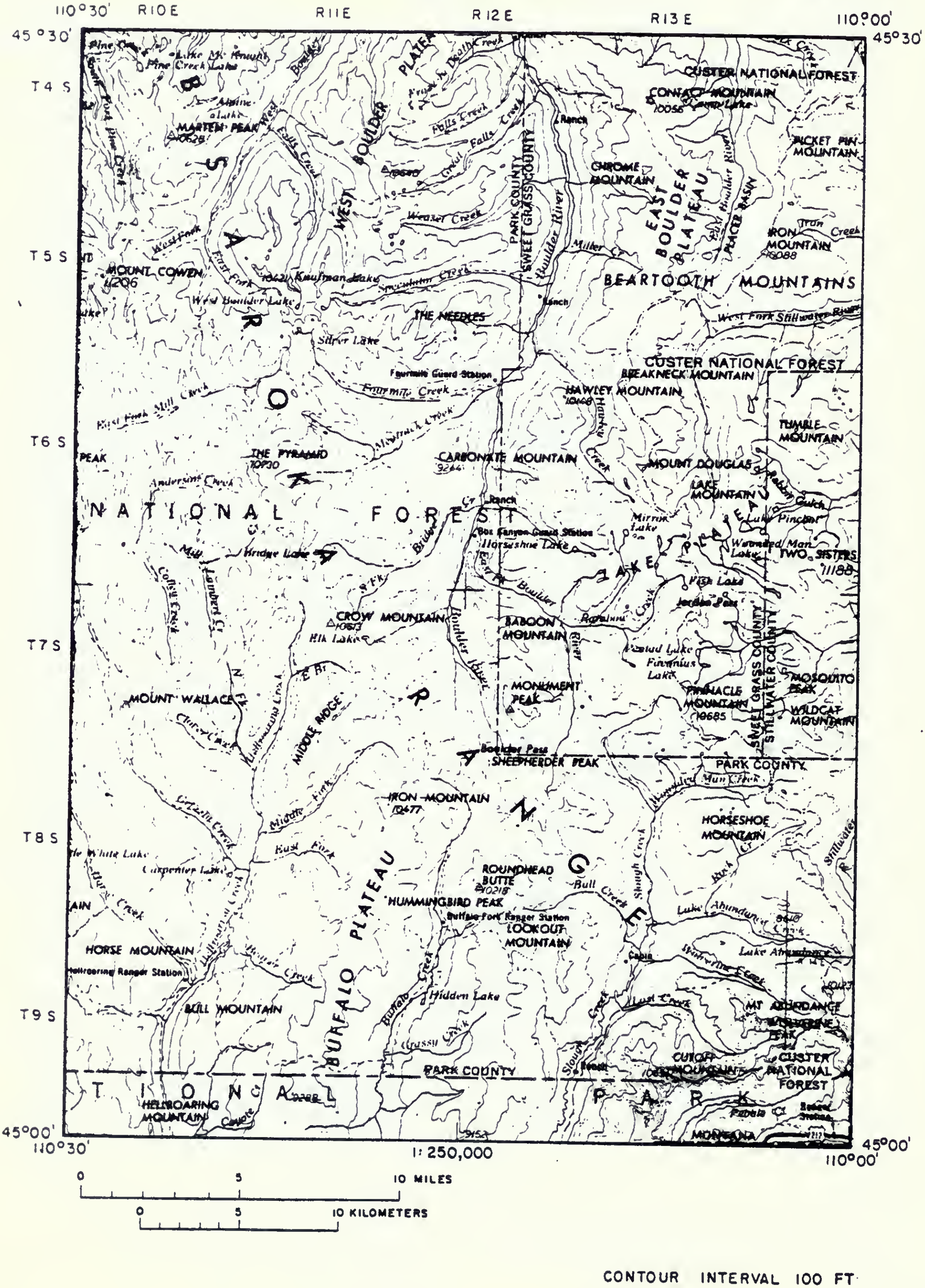
0 5 10 KILOMETERS

SPECIFIC CONDUCTANCE SURVEY

BOZEMAN 8



BOZEMAN 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB1	Gallatin	02N 01E 36 DA	11 04 75	Pond	no flow	Low swampy area	3780		no					
2	WQB7	Gallatin	02N 02E 30 BAD	11 05 76	River	400 cfs (E)	Madison River	273		yes					
3	WQB5	Gallatin	02N 02E 28 DCC	11 05 76	Creek	6 cfs (E)	Ray Creek near highway	593		yes					
4	WQB2	Gallatin	01N 02E 15 DCC	11 04 78	Creek	1 cfs (E)	Sloan Creek	260		no					
5	WQB3	Gallatin	01N 02E 16 DCB	11 04 76	Creek	4 cfs (E)	Spring Creek	420		no					
6	WQB4	Gallatin	01N 02E 16 CCD	11 04 76	Creek	6 cfs (E)	Ray Creek	380		no					
7	WQB6	Gallatin	01N 02E 07 B	11 04 76	Ditch	no flow	Ranch irrigation ditch	310		no					
8	WQB3	Madison	01S 01W 29 AD	11 06 75	Drain	2 cfs (E)	Drain from bench near dump	1030		no					
9	WQB2	Madison	01S 01W 21 OC	11 05 75	Spring	25 gpm (E)	Below bench, irrigation above, 0.5 mile N of dump	480		no					
10	WQB1	Madison	01S 01W 34	11 04 75	Stream	4 cfs (E)	Dry Hollow Creek, dryland farming area	660		no					
11	WQB2	Park	03N 09E 31 CD	09 08 75	Creek	0.5 cfs (E)	Nameless creek 2 miles S of Wilsall	760		no					
12	WQB1	Park	02N 09E 08 ACD	09 08 76	Creek	2 cfs (E)	Antelope Creek 2.5 miles N of Clyde Park on 289	640		no					
13	WQB1	Sweet Grass	01N 14E 07 AB	11 18 75	Ditch	10 cfs (E)	Otter Creek irrigation return	804		yes					
14	WQB2	Sweet Grass	01N 13E 35 DAO	10 27 76	River	220 cfs (E)	Yellowstone River	324		yes					
15	WQB4	Sweet Grass	01N 13E 34 CCD	10 27 76	Canal	2 cfs (E)	Irrigation canal	310		no					
16	WQB3	Sweet Grass	01N 13E 35 CAD	10 27 78	Ditch	1 cfs (E)	Cow Creek	370		no					
17	WQB5	Sweet Grass	01S 12E 12 ADA	10 27 76	Stream	2 cfs (E)	Duck Creek	320		no					
18	76M1971	Park	03N 10E 24	06 08 77	Creek	125 cfs (M)	Cottonwood Creek near Ibex	60	7	yes	6415				

BOZEMAN

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
2	02N	02E	30	BAD	11	05	76	River	20.6	5.3	28	4.5				122		17	15
3	02N	02E	28	DCC	11	05	76	Creek	51	16.5	54	9.3				306		21	33
13	01N	14E	07	AB	11	18	75	Ditch	67	14.1	72	2.5				317	5	8	94
14	01N	13E	35	DAD	10	27	76	River	28.9	11.6	20	4.5				152		8.4	21
18	03N	10E	24		06	08	77	Creek	7.9	.6	.9	.3	.02	<.01	4.4	27		.4	2.7

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

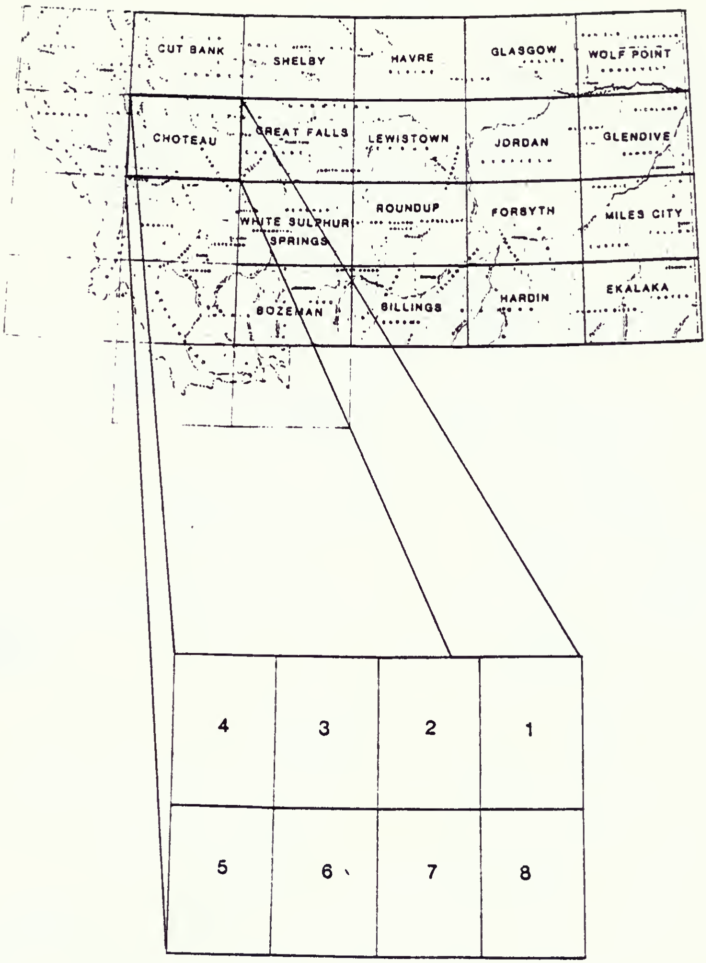
* Values reported as sodium plus potassium

1° x 2° Sheet

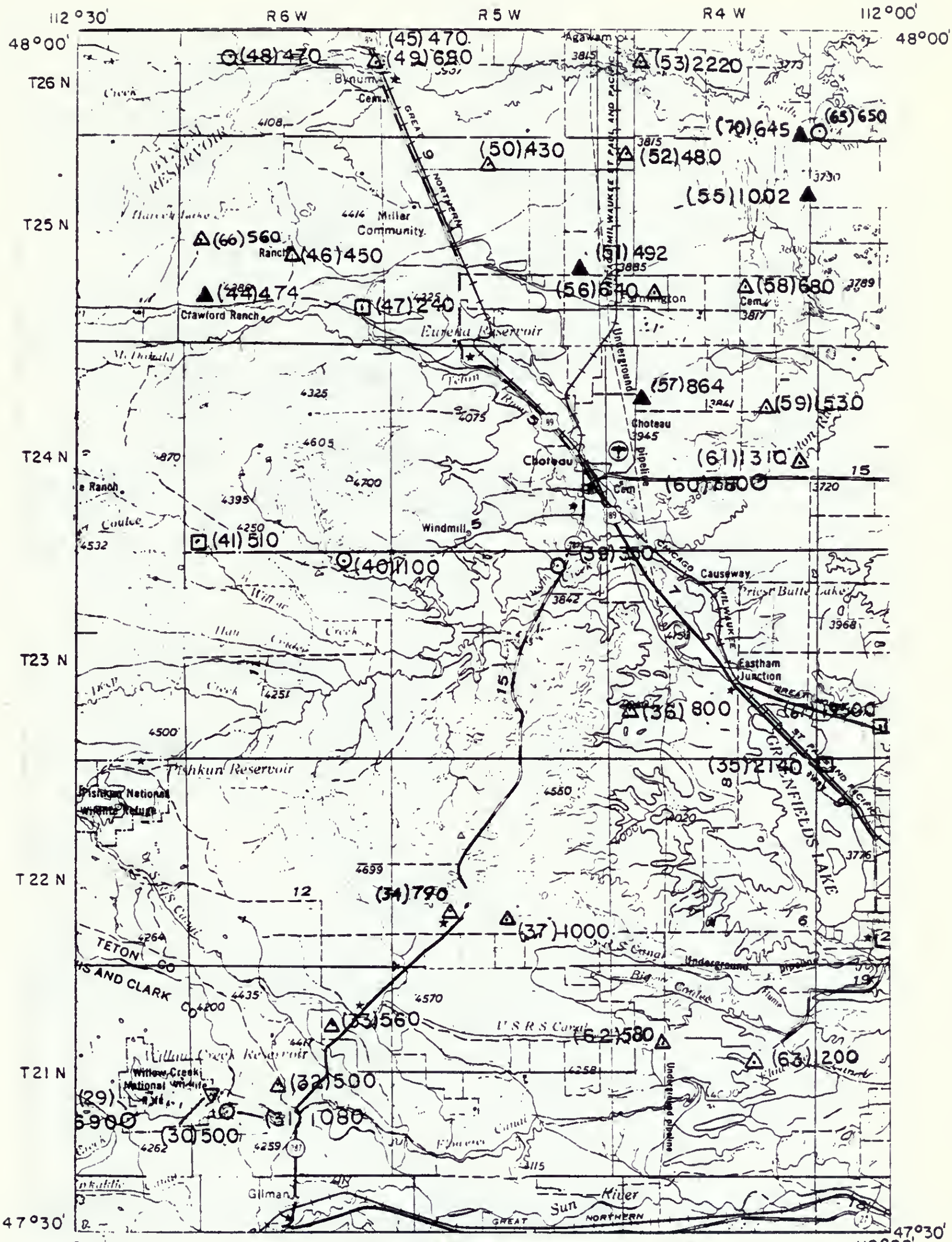
of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
2	.01		8.0		273	150	73	100	1.4	WQB			no	76W2667
3	.5		8.2		593	335	195	250	1.7	WQB			no	76W2666
13	.23		8.46		804	580	225	270	2.1	WQB			no	75W2284
14	.01		7.9		324	180	120	125	0.6	WQB			no	76W2649
18	.068	<.1	7.47	7	50	31	22	22	0.1	USFS			no	76M1971

LOCATION BASE MAP



CHOTEAU 1° x 2° SHEET



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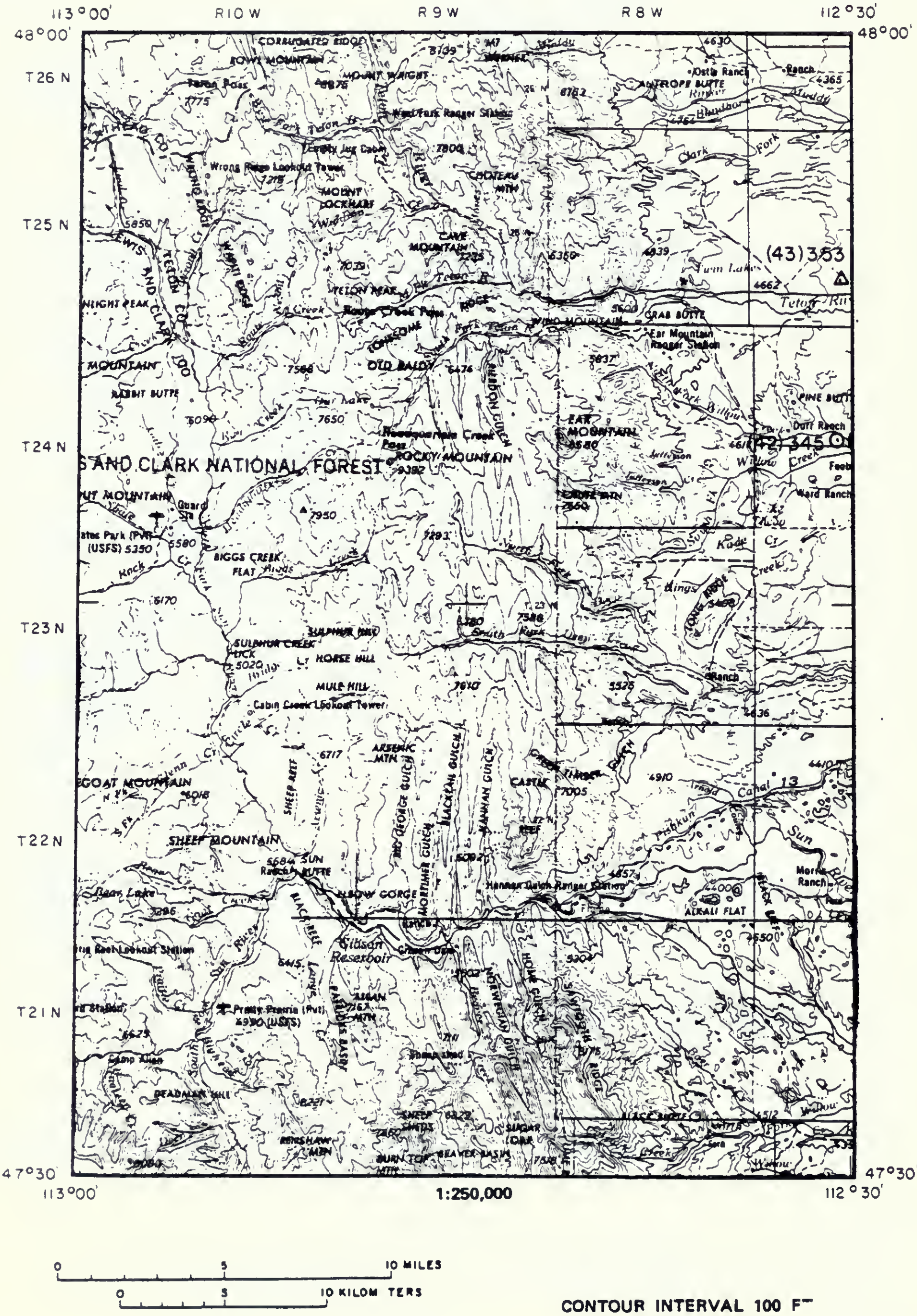
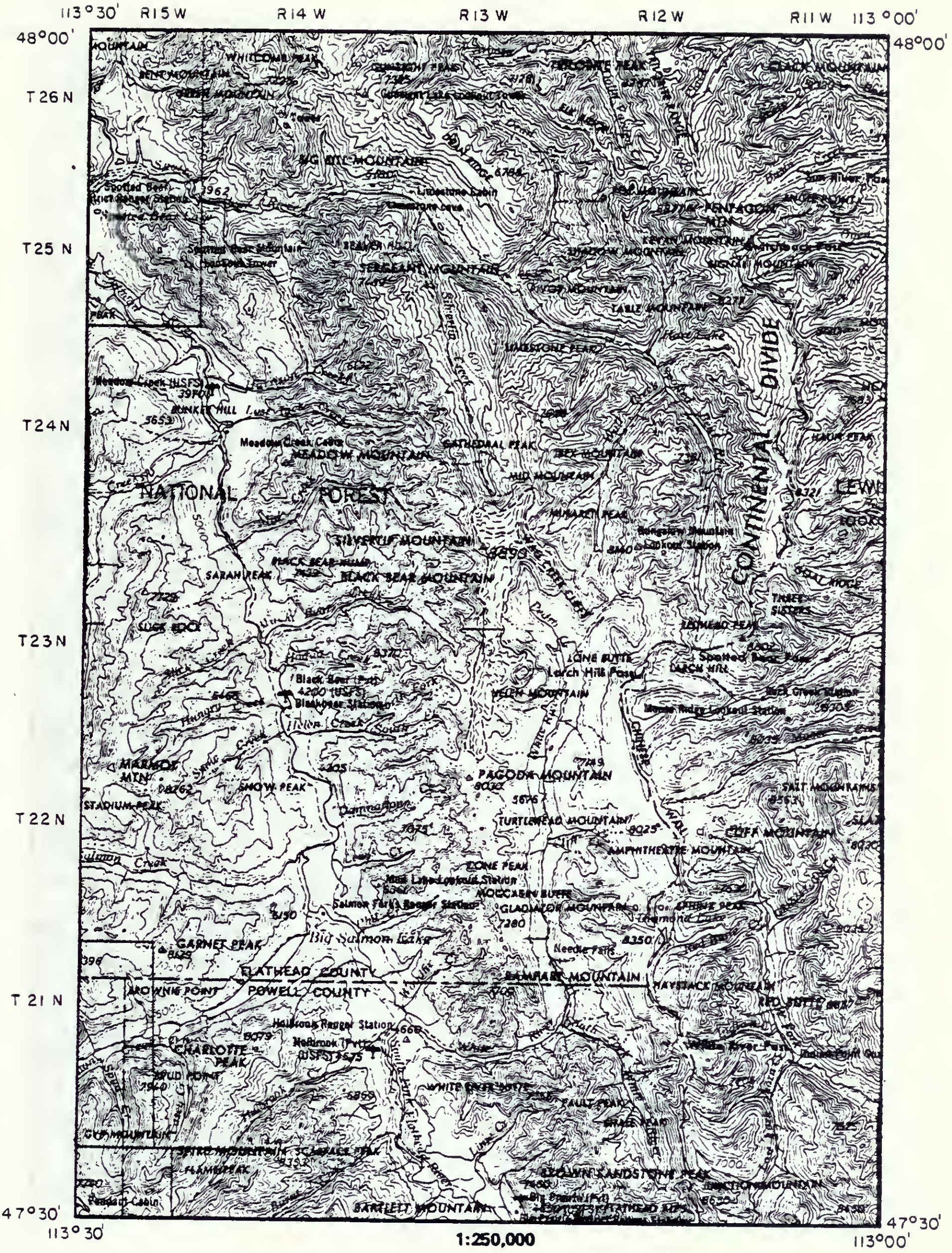
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

CHOTEAU 2





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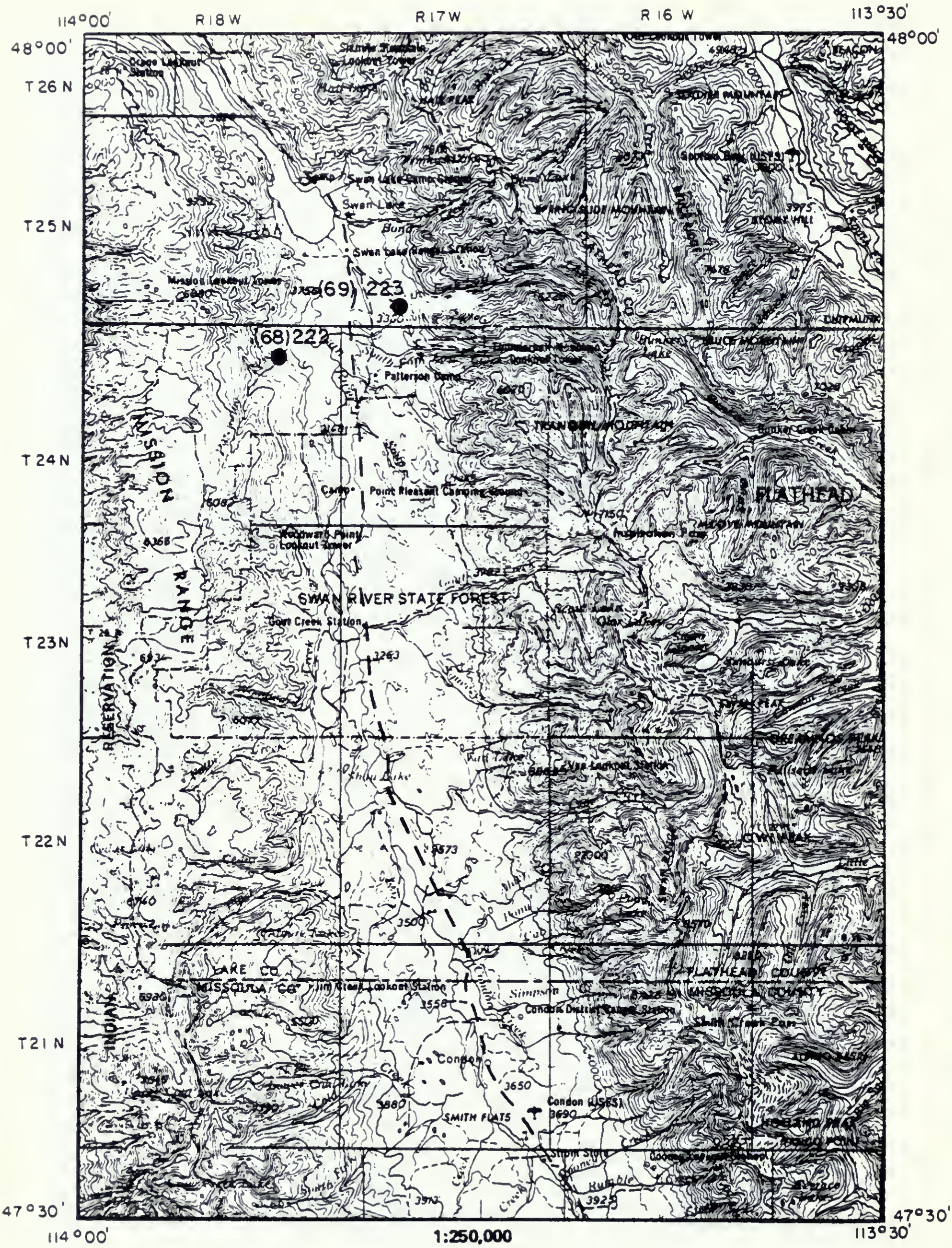
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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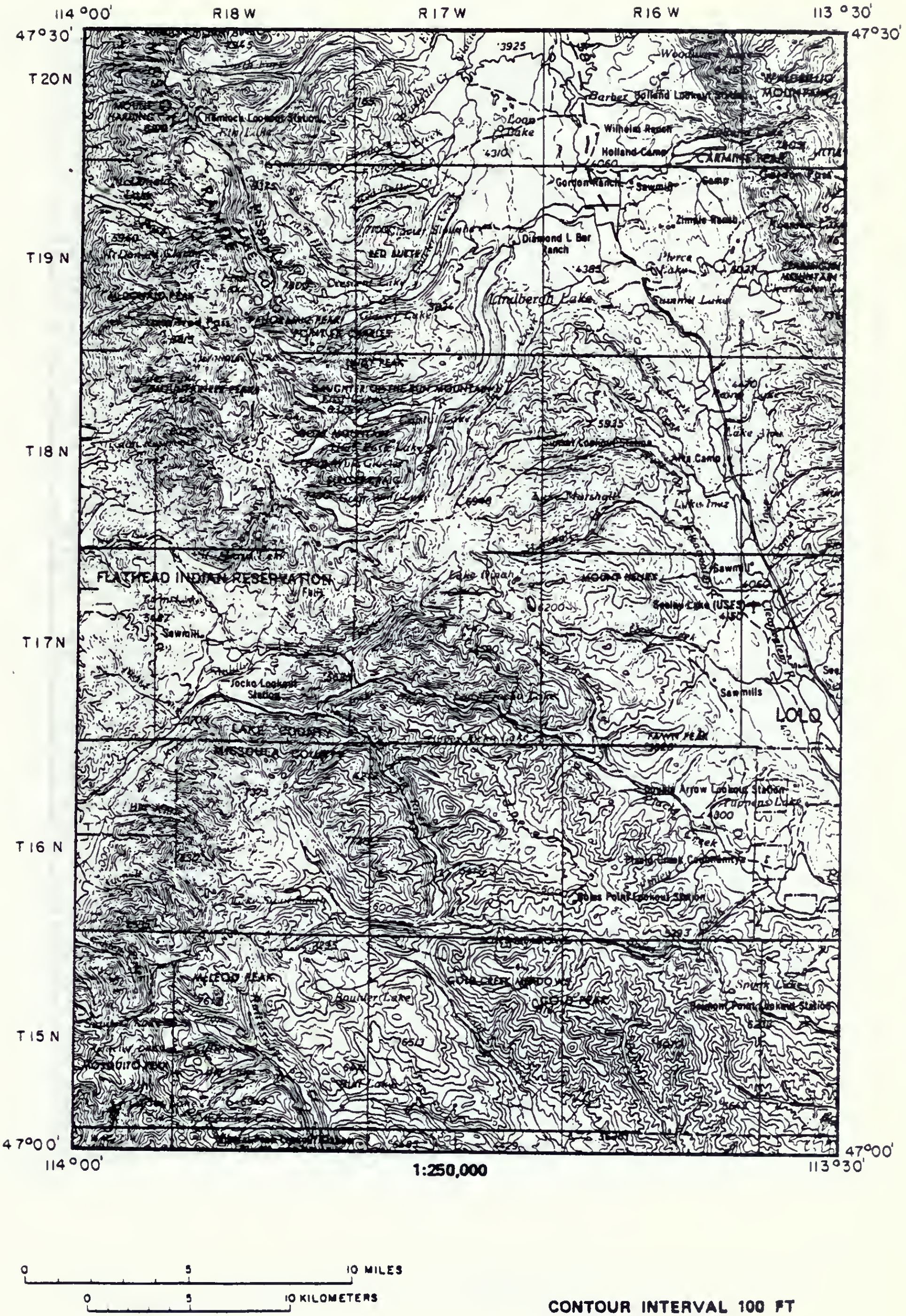
CONTOUR INTERVAL 100 FT


114°00'
R18W
R17W
R16W
113°30'
47°30'
47°30'
T20N
T19N
T18N
T17N
T16N
T15N
47°00'
47°00'
114°00'
113°30'
FLATHEAD INDIAN RESERVATION
LAKE COUNTY
MISSOULA COUNTY
Lindbergh Lake
LOLO
Seeley Lake (USFS)
Holland Lookout Station
Wilhelm Ranch
Holland Camp
Gordon Ranch
Diamond L Bar Ranch
Jocko Lookout Station
Sawmill
Sawmills
Loon Lake
Pierce Lake
Summit Lake
Hemlock Lookout Station
Crescent Lake
Lake Inez
1:250,000
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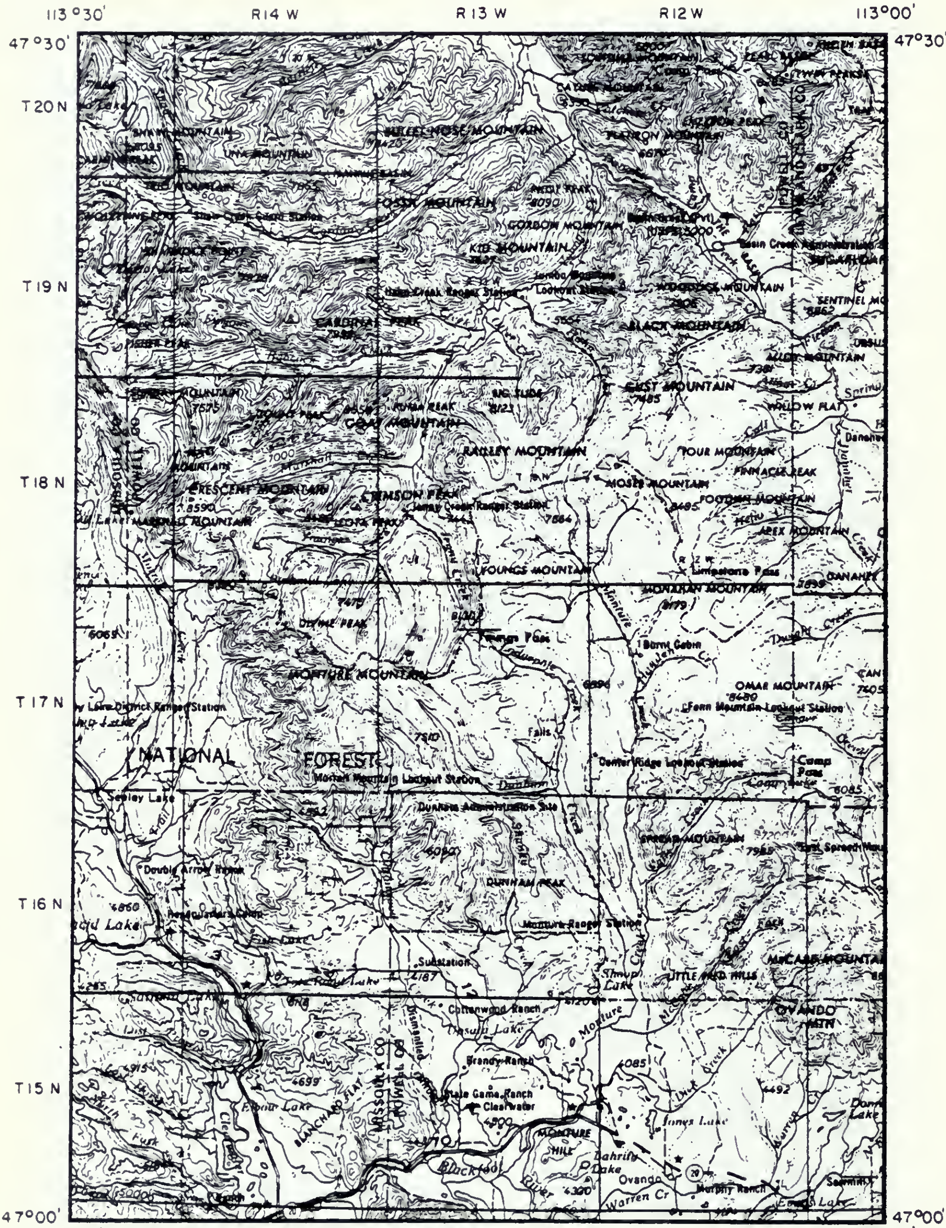
0 5 10 KILOMETERS
CONTOUR INTERVAL 100 FT



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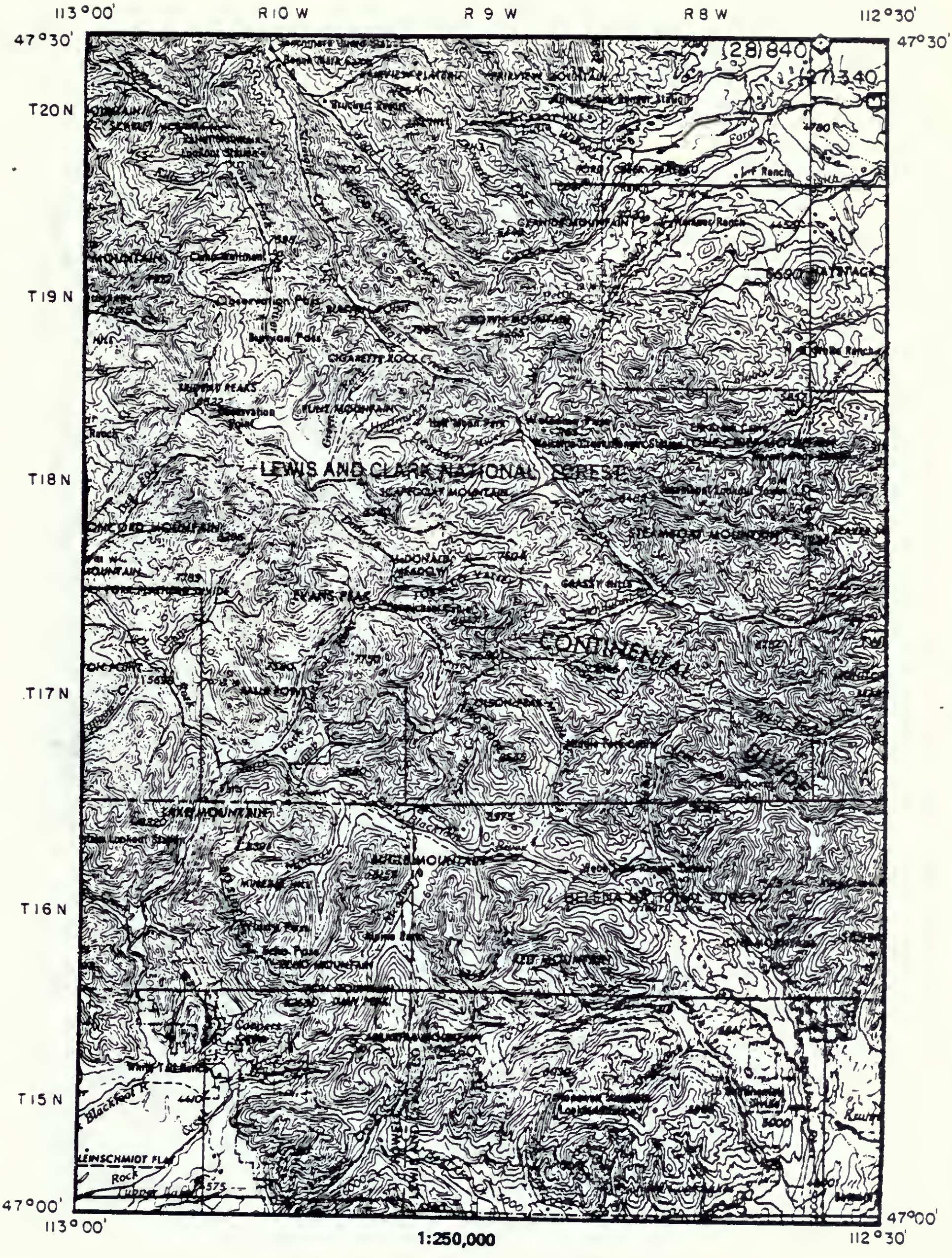
CONTOUR INTERVAL 100 FT



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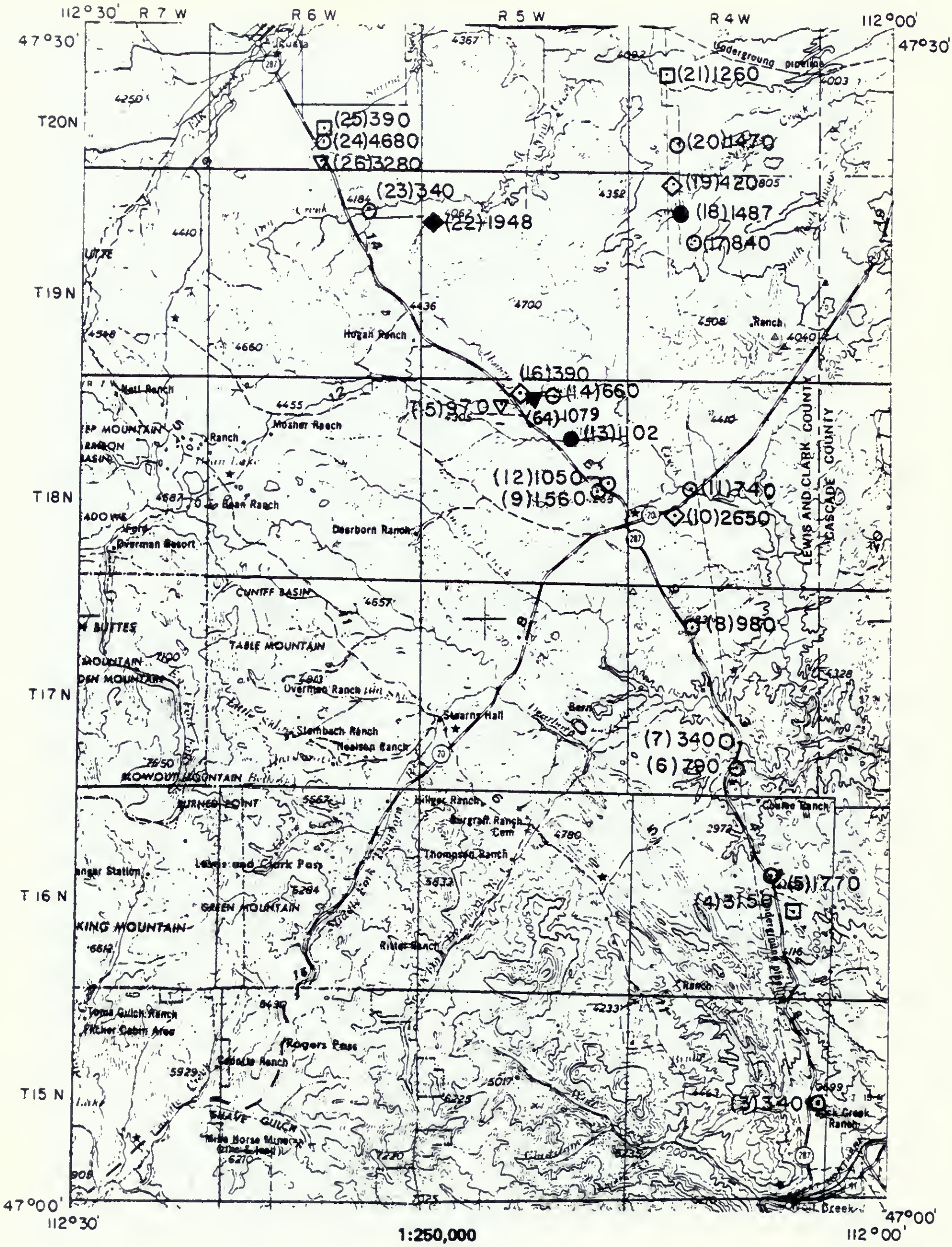
CONTOUR INTERVAL 100 FT



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0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

CHOTEAU 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	not on map														
2	not on map														
3	WQB1	Lewis & Clark	15N 04W 24 AB	04 06 76	Creek	5.5 cfs (E)	Rock Creek at highway	340		no					
4	WQB2	Lewis & Clark	16N 04W 23 AD	04 06 76	Pond	no flow	Near road junction	3160		no					
5	WQB11	Lewis & Clark	16N 04W 14 CAA	05 06 76	Creek	1 cfs (E)	Kirley Creek at highway 287	1770		no					
6	WQB3	Lewis & Clark	17N 04W 34 AC	04 06 76	Creek	low	Deadman Creek at highway	790		no					
7	WQB10	Lewis & Clark	17N 04W 27 BDO	04 06 76	River	25 cfs (E)	Dearborn River at highway bridge	340		no					
8	WQB12	Lewis & Clark	17N 04W 09 BB	05 06 76	Creek	0.5 cfs (E)	Unnamed creek at highway 287	980		no					
9	WQB22	Lewis & Clark	18N 05W 24 B	11 20 75	Coulee	25 gpm (E)	Drains dryland farming area to the NE, alkali	1560		no					
10	WQB21	Lewis & Clark	18N 04W 20 D	11 20 75	Spring		Emerges from dryland farming area to S	2650		no					
11	WQB20	Lewis & Clark	18N 04W 21 B	11 20 75	Creek	1 cfs (E)	Flat Creek, mostly rangeland	740		no					
12	WQB4	Lewis & Clark	18N 05W 24 BA	04 06 76	Creek	low	Unnamed creek at highway	1050		no					
13	WQB18	Lewis & Clark	18N 05W 11 CA	05 06 76	Creek	2 cfs (E)	Flat Creek near Milford Colony	1102		yes					
14	WQB29	Lewis & Clark	18N 05W 03	11 20 75	Creek	1 cfs (E)	Hogan Creek, several seeps feed this creek	660		no					
15	WQB23	Lewis & Clark	18N 05W 04 CB	11 20 75	Drain		Sampled last year (1975)	670		no					
16	WQB28	Lewis & Clark	18N 05W 04	11 20 76	Spring		Spring fed, below large saline seep area	390		no					
17	WQB9	Lewis & Clark	18N 04W 09 CDC	04 06 76	Creek	low	Culvert under road	840		no					
18	WQB8	Lewis & Clark	19N 04W 06 AA	04 06 76	Creek	4 cfs (E)	Tributary to North Fork Simms Creek	1487		yes					
19	WQB7	Lewis & Clark	19N 04W 06 AC	04 06 76	Spring	no flow		420		no					
20	WQB6	Lewis & Clark	20N 04W 32 AAA	04 06 76	Creek	low	In field	1470		no					
21	WQB5	Lewis & Clark	20N 04W 20 AB	04 06 76	Pond	no flow	Seep	1260		no					
22	WQB4	Lewis & Clark	19N 05W 07 CB	05 06 76	Spring	no flow	Gus Keller seep	1948		yes					Keller, Gus
23	WQB13	Lewis & Clark	19N 06W 11 AB	06 06 76	Creek	26 cfs (E)	Dry Creek at bridge	340		no					
24	WQB27	Lewis & Clark	20N 06W 34	11 20 76	Creek	0.5 cfs (E)	Spring Creek, alkali along sides	4680		no					
25	WQB15	Lewis & Clark	20N 06W 27 C	05 06 76	Pond	no flow	Adjacent to gravel pit	390		no					
26	WQB24	Lewis & Clark	20N 06W 34	11 20 76	Drain	10 gpm (E)	Alkali along sides, dryland farming area	2280		no					
27	WQB18	Lewis & Clark	20N 07W 20 AD	06 06 76	Reservoir	no flow	Nilan Reservoir at dam	340		no					
28	WQB26	Lewis & Clark	20N 07W 07	11 20 76	Spring	10 gpm (E)	Rangeland with much alkali	840		no					
29	WQB25	Lewis & Clark	21N 07W 26	11 20 76	Creek	3 cfs (E)	Willow Creek; irrigated area with alkali	690		no					
30	WQB16	Lewis & Clark	21N 06W 19 DA	06 06 76	Canal	50 cfs (E)	Flowerss Canal at bridge	500		no					

CHOTEAU 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	WDB17	Lewis & Clark	21N 06W 28 BB	05 06 76	Creek	1 cfs (E)	Willow Creek at Culvert	1080		no					
32	MBMG90	Teton	21N 06W 21	08 28 76	Well		Domestic use	500	22	no	4280				Harris
33	MBMG91	Teton	21N 06W 11 CBC	08 28 76	Well		Domestic use, good water	560	12	no	4300		58		Allen
34	MBMG97	Teton	22N 05W 29	08 28 76	Well		Domestic use	790	18	no	4500		104		Neckstad
35	MBMG100	Teton	22N 34W 06	08 28 76	Lake		Freezeout Lake	2140	24	no					
36	MBMG57	Teton	23N 04W 30	08 28 76	Well		Domestic use	800	12.6	no	3840	35	65		Lear, Jack
37	MBMG96	Teton	22N 05W 27 CAD	08 28 76	Well		Stock use	1000	15	no	4420	35	85		Neckstad
38	not on map														
39	MBMG95	Teton	23N 05W 02 AAA	08 28 76	Creek	5 cfs	Deep Creek	350	17	no	3800				
40	MBMG94	Teton	23N 06W 02 BAB	08 28 76	Creek	5 cfs	Tributary to Willow Creek	1100	16	no					
41	MBMG93	Teton	24N 06W 31	08 28 76	Pond			510	19	no					
42	MBMG92	Teton	24N 07W 21 BDA	08 28 76	Creek	2 cfs	Willow Creek	340	17	no	4430				
43	MBMG12	Teton	25N 07W 28 ACD	08 25 76	Well		Domestic use	350	13	no	4520		30		Olson
44	MBMG11	Teton	25N 06W 30 DBD	01 18 77	Well		Domestic use	474	13	yes	4280		20	112TRRC	Crery
45	MBMG36	Teton	26N 06W 24 DDC	08 27 76	Well	10 gpm	Stock use	470	11	no	3980	11	16		Page, Roy
46	MBMG10	Teton	25N 06W 22 BCAA	08 25 76	Well		Domestic use, some iron stain	450	14	no	4180		26		
47	MBMG9	Teton	25N 06W 36 B	08 25 76	Reservoir		Eureka Reservoir	240	19	no	4120				
48	MBMG33	Teton	26N 06W 20 DCC	08 25 76	Creek	1.5 cfs	Muddy Creek	470	13	no	4120				
49	MBMG35	Teton	26N 06W 24 DDC	08 27 76	Well		Domestic use	690	15	no	3980	4	9		
50	MBMG31	Teton	25N 05W 04 DD	08 26 76	Well	12 gpm	Domestic use, good water but a little hard	430	11	no	3840	15	68		
51	MBMG30	Teton	25N 05W 24 CDDD	01 17 77	Well		Domestic use, some iron (?) stain	492	13	yes	3890	18	32	110TRRC	
52	MBMG32	Teton	25N 04W 08	08 26 76	Well		Domestic use, good water	480	12	no	3820	27	30		
53	MBMG41	Teton	26N 04W 20 CBB	08 27 76	Well	13 gpm	Domestic use	2220	13	no	3780	48	55		
54	not on map														
55	76M1344	Teton	25N 04W 12 DADD	10 13 76	Well	6 gpm	Domestic use, iron stain, well pumps some sand	1002		yes	3760	15	82	112OTSH	
56	MBMG29	Teton	25N 04W 28	08 26 76	Well		Domestic use	640	12	no	3850	11	12		
57	MBMG43	Teton	24N 04W 08 CBB	01 18 77	Well	10 gpm	Domestic use, water forms calcium deposits	864	16	yes	3890	10	150	211CLRD	
58	MBMG42	Teton	25N 04W 26 BCC	08 27 76	Well		Domestic use	680	10	no	3720				
59	MBMG53	Teton	24N 04W 11 DCCC	08 27 76	Well		Domestic use	1530	17.5	no	3760	30	45		
60	MBMG44	Teton	24N 04W 26 ABA	08 27 76	River	35 gpm (E)	Teton River	780	13	no	3690				

CHOTEAU 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
61	MBMG45	Teton	24N	04W	24	DBD	08	27	76	Well		Domestic use, located along Teton River	1310	15	no	3660		16		Ferris, James
62	MBMG88	Teton	21N	04W	17	AAA	08	28	76	Well		Domestic use	580	14	no	4160	4	16		Erickson
63	MBMG87	Teton	21N	04W	14	CDA	08	26	76	Well		Domestic use	1200	10	no	3980		64		Stanley
64	WQB52	Lewis & Clark	18N	05W	03	CB	11	20	75	Drain	10 gpm (E)	Lewis & Clark Number 1 drain	1078		yes					
65	MBMG20	Teton	26N	03W	31	CCCB	08	26	76	Creek	10 cfs	Muddy Creek	650	17	no	3740				
66	MBMG34	Teton	25N	06W	16	DCC	08	27	76	Well	15 gpm		660	14.5	no	3880	20	90		Milford Colony
67	MBMG58	Teton	23N	03W	33	BBA	08	27	76	Pond		In grain field	19500	18.5	no					
68	76M1942	Lake	24N	18W	03		05	20	77	Creek		Porcupine Creek above Gildart Creek	222	6.5	yes					
69	76M1941	Lake	25N	17W	31		05	20	77	Creek		North Fork Lost Creek	223	6.0	yes					
70	76M1619	Teton	26N	04W	36	DCDB	01	17	72	Well	1.4 gpm (M)		645	9.5	yes	3770	9	107		Weist, E.

CHOTEAU

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride Chloride (Cl)	Sulfate (SO_4)
13	18N	05W	11	CA	05	05	76	Creek	84	16	131	12				343		19	220
18	19N	04W	08	AA	04	06	76	Creek	57	26.2	250	3.3				459	17	22	330
22	19N	05W	07	CB	05	05	76	Spring	196	38.8	150	27				350		12.6	686
44	25N	06W	30	DBD	01	18	77	Well	68.8	21	3.2	.5	<.01	<.01	5.8	273		17	14.7
51	25N	05W	24	CDDD	01	17	77	Well	22.5	47	13.8	.6	<.01	<.01	5.3	268		3.4	46.2
56	25N	04W	12	DADD	10	13	75	Well	39	32.6	144	2.2	.68	.21	7.1	466		56.4	84.3
57	24N	04W	08	CBB	01	18	77	Well	32.5	89	31.9	1.0	<.01	<.01	11.9	498		24.4	52
64	18N	05W	03	CB	11	20	75	Drain	51	54	85	4.8				366		19	180
68	24N	18W	03		05	20	77	Creek	35.4	6.7	.7	1.0	<.01	<.01	6.5	142		.1	1.7
69	25N	17W	31		05	20	77	Creek	35	7.8	.8	.3	.04	<.01	3.9	140	1	.2	3.0
70	26N	04W	36	DCDB	01	17	77	Well	43.6	23	71.5	1.9	.01	.12	8.1	346		9.6	56.8

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated
* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

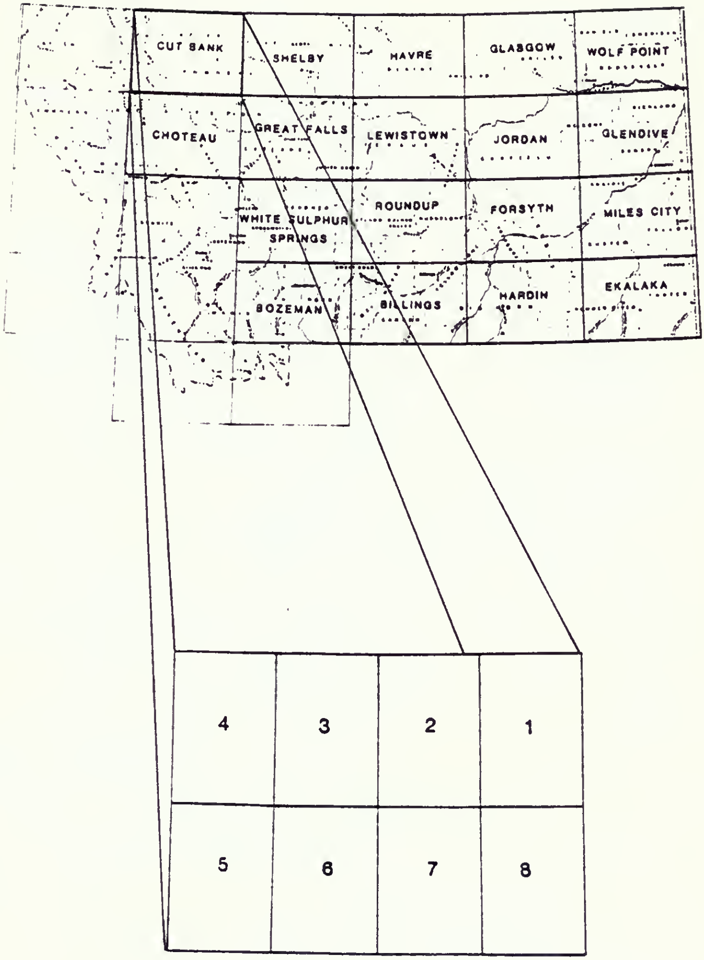
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
13	8.9		8.1	16	1102		275	281	3.4	WQB			no	76W0681
18			8.74	8	1487	1164	250	404	6.9	WQB			no	76W0564
22	.41		7.8	12	1948		650	287	2.6	WQB			no	76W0680
44	.115	.3	7.9	13	474	265	258	224	.1	MBMG	20	110TRRC	yes	76M1625
51	2.87	.6	8.17	13	492	276	250	220	.4	MBMG	32	110TRRC	yes	76M1621
55	<.02	.9	7.74		1002	597	231	382	4.1	MBMG	82	112OTSH	yes	76M1344
57	2.36	.4	8.09	16	864	491	447	408	.7	MBMG	150	211CLRD	yes	76M1622
64	13		7.69		1079	783	374	300	1.9	WQB			no	75W2295
68	.06	<.1	8.23	6.5	222	122	116	116		USFS			no	76M1942
69	.280	<.1	8.34	6	223	121	119	117		USFS			no	76M1941
70	.038	.7	8.04	9.5	646	386	204	284	2.2	MBMG	107	112OTSH	yes	76M1619

CHOTEAU 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (μg/l)	Beryllium (μg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (μg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (μg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
44	25W 06W 30 DBD	<.05	<.2	<2		.04		<.01	<.03	<.05	.01	<.3	<.01	.078	<2		.30	<.05	.05	76M1625
61	25W 06W 24 CDDD	<.05	<.2	<2		.06		<.01	<.01	<.05	.01	<.3	.01	.028	24.5		.46	<.05	.12	76M1621
56	25N 04W 12 DADD	.13			<5	.21					.04				<2			.05		
67	24N 04W 08 CBB	<.05	<.2	<2		.16		<.01	.02	<.05	.05	<.3	.01	.059	<2		.99	.13	.34	76M1622
70	26N 04W 36 DCDB	<.05	<.2	<2		.12		<.01	<.01	<.05	.02	<.3	<.01	.026	2		.48	<.05	<.01	76M1619

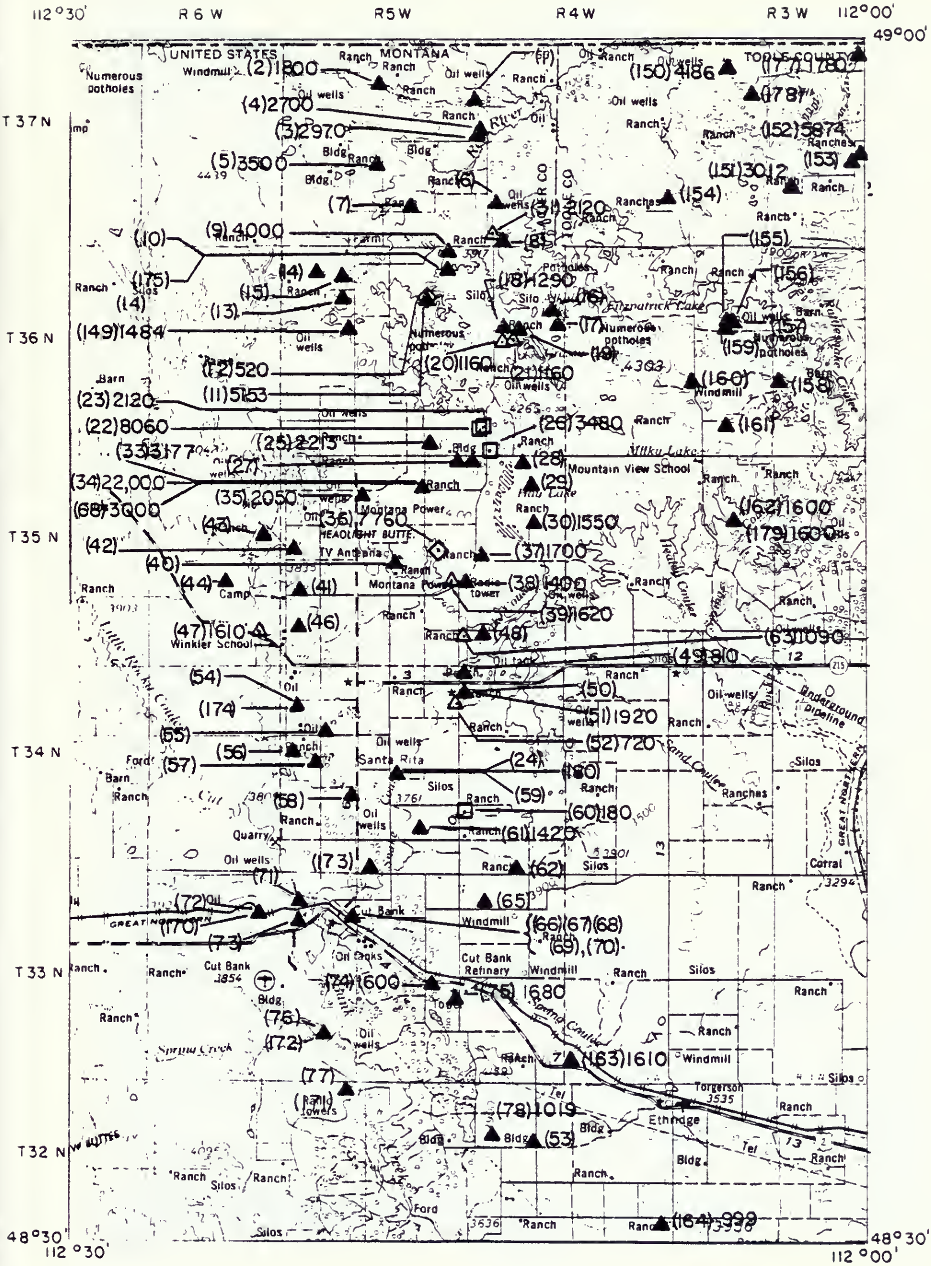
LOCATION BASE MAP



CUT BANK 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

CUT BANK 1



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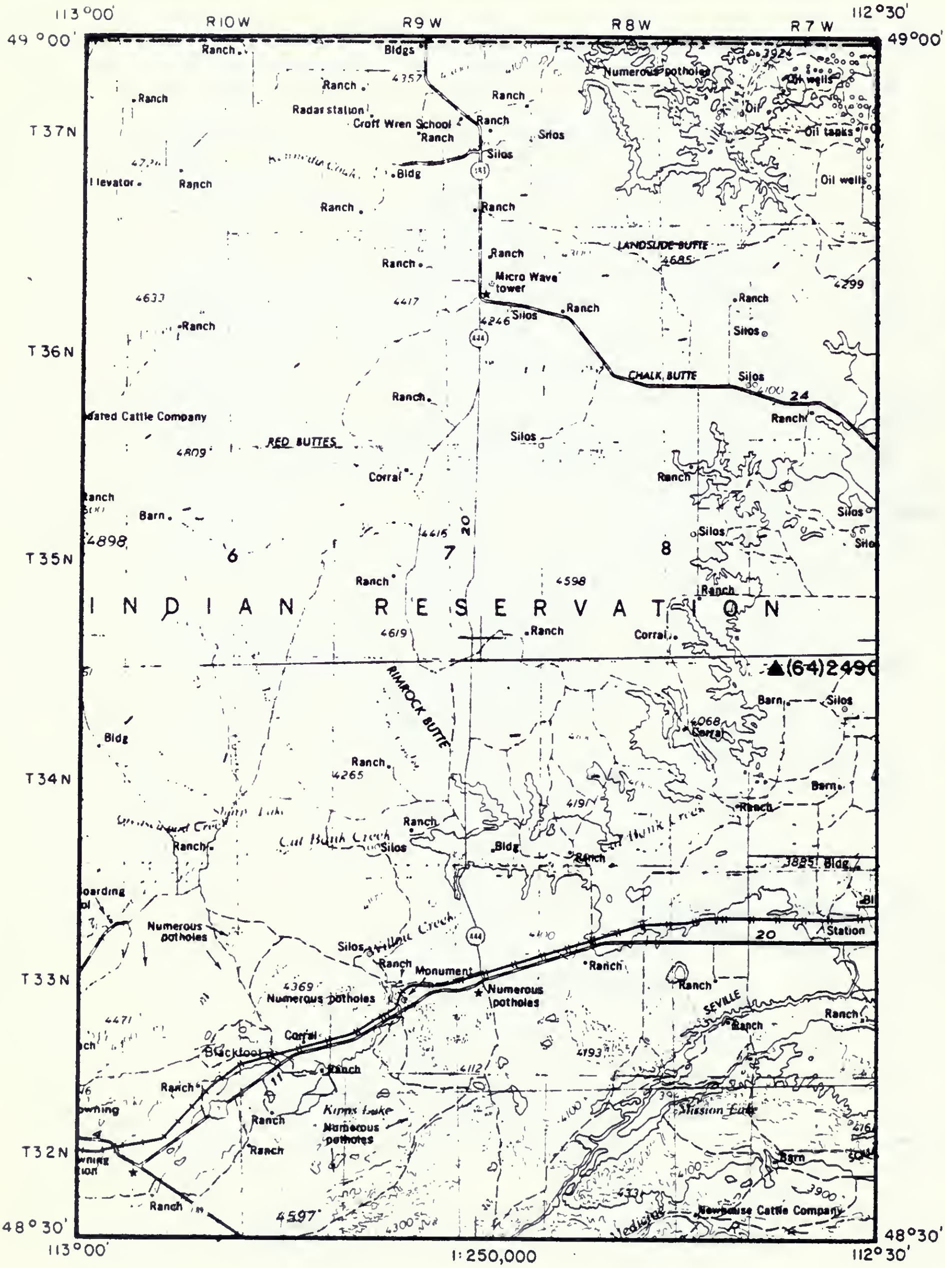

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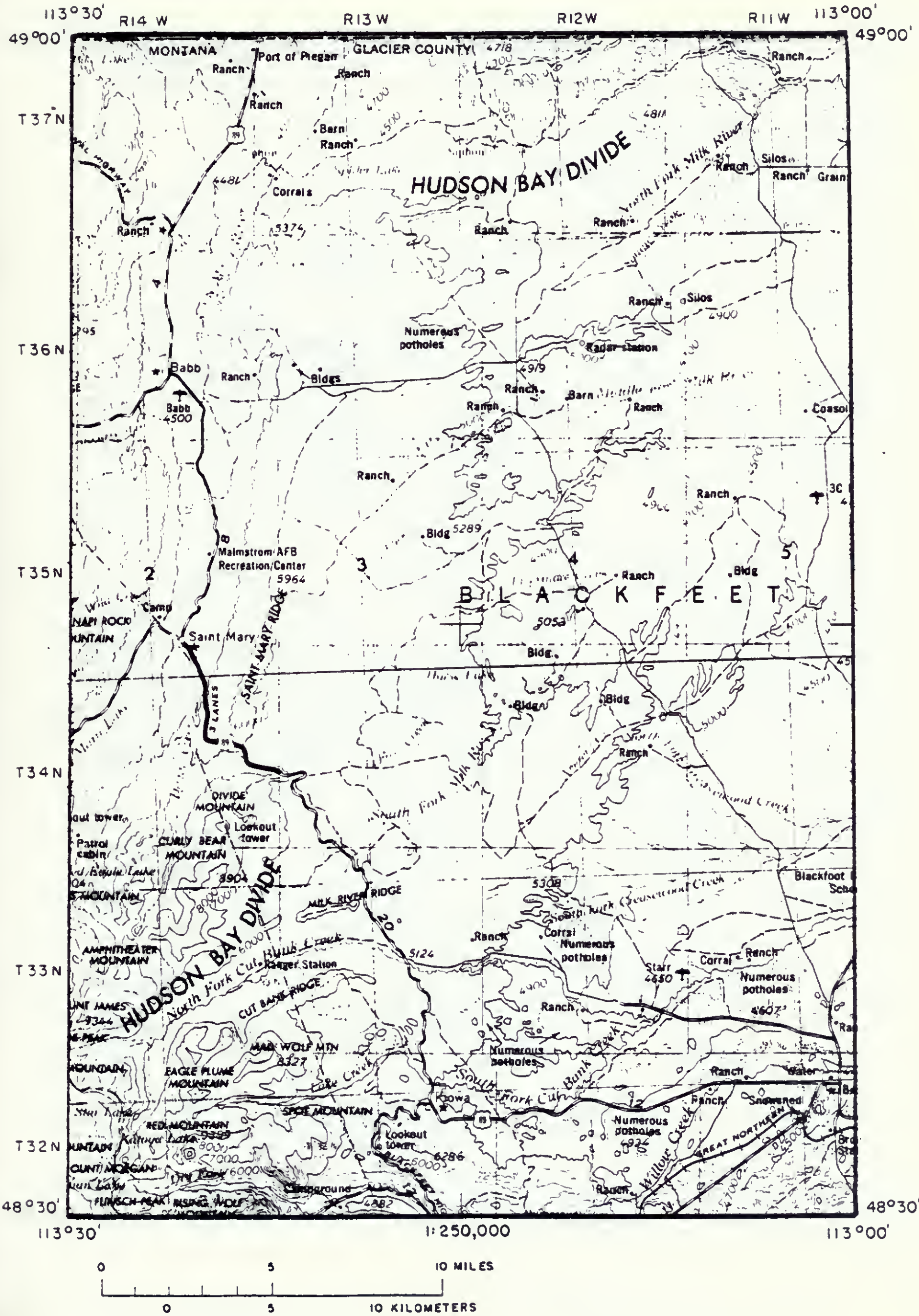

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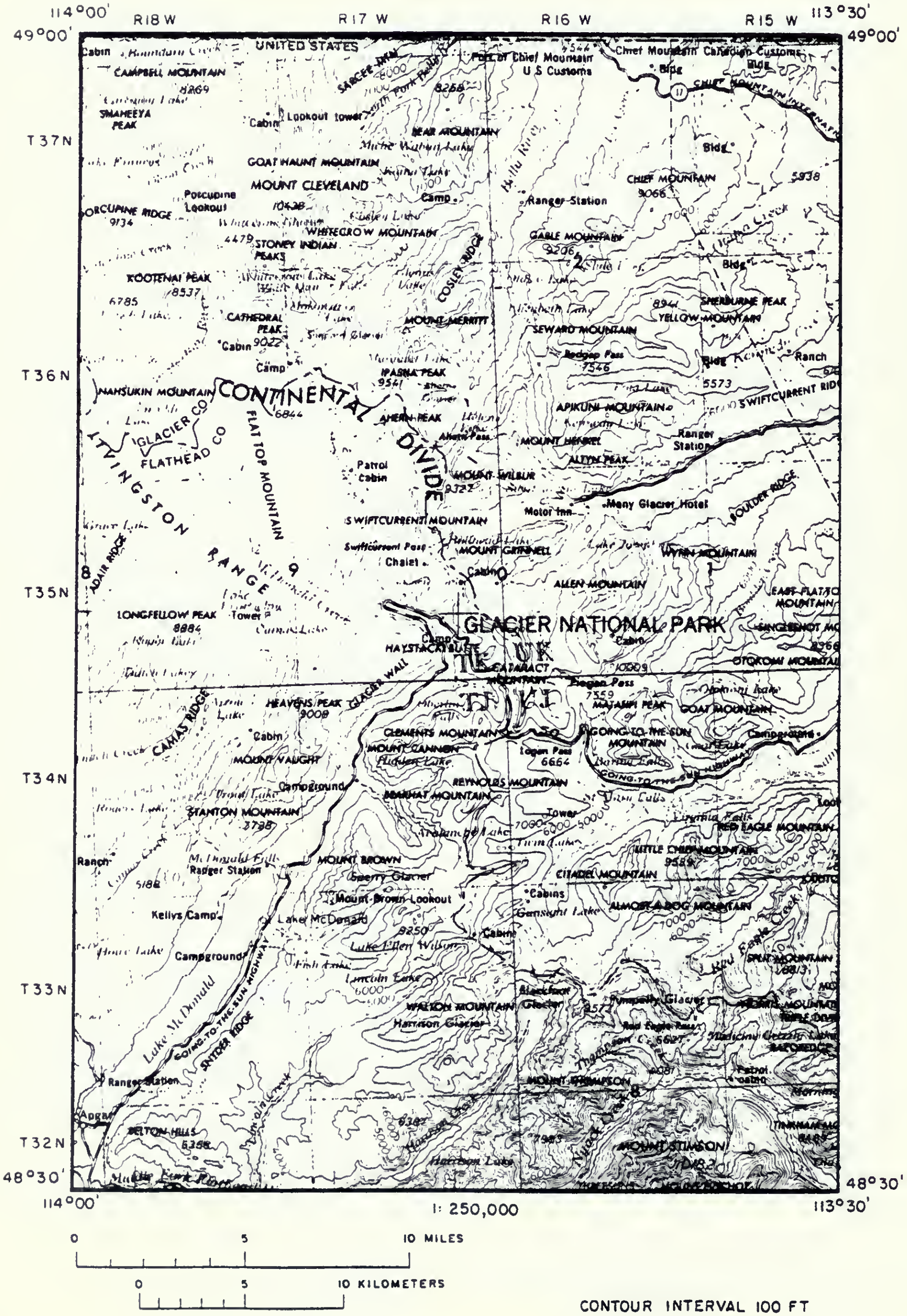
114°00'
R18 W
R17 W
R16 W
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T33N
T32N
48°30'
48°30'
114°00'
113°30'
UNITED STATES
Port of Chief Mountain U S Customs
Chief Mountain Canadian Customs Bldg
CAMPBELL MOUNTAIN
8269
SHAHEEYA PEAK
Lookout tower
BEAR MOUNTAIN
GOAT HAUNT MOUNTAIN
MOUNT CLEVELAND
10428
Porcupine Lookout
PORCUPINE RIDGE
9134
WHITECROW MOUNTAIN
STONEY INDIAN PEAKS
CHIEF MOUNTAIN
9066
5938
Ranger Station
GABLE MOUNTAIN
9206
COSLEY RIDGE
KOOTENAI PEAK
8537
6785
CATHEDRAL PEAK
9022
MOUNT MERRITT
SEWARD MOUNTAIN
SHERBURNE PEAK
YELLOW MOUNTAIN
8941
Redgap Pass
7546
Ranch
5573
IPASHA PEAK
9541
NAHSUKIN MOUNTAIN
CONTINENTAL DIVIDE
GLACIER CO
FLATHEAD CO
LIVINGSTON RANGE
FLAT TOP MOUNTAIN
6844
AHERN PEAK
Ahern Pass
APIKUNI MOUNTAIN
SWIFTCURRENT RIDGE
MOUNT HENKEL
ALTYN PEAK
Ranger Station
Patrol Cabin
MOUNT WILBUR
9322
Motor Inn
Many Glacier Hotel
BOULDER RIDGE
SWIFTCURRENT MOUNTAIN
Swiftcurrent Pass
Chalet
MOUNT GRINNELL
WYNN MOUNTAIN
ADAIR RIDGE
ALLEN MOUNTAIN
EAST FLATTOP MOUNTAIN
LONGFELLOW PEAK
8884
GLACIER NATIONAL PARK
HAYSTACK BUTTE
CATARACT MOUNTAIN
10009
OTOKOMI MOUNTAIN
Siyeh Pass
7559
MATAHPI PEAK
GOAT MOUNTAIN
GLACIER WALL
HEAVENS PEAK
9008
CAMAS RIDGE
CLEMENTS MOUNTAIN
GOING-TO-THE-SUN MOUNTAIN
Campground
MOUNT VAUGHT
MOUNT CANNON
Logan Pass
6664
REYNOLDS MOUNTAIN
GOING-TO-THE-SUN HIGHWAY
Campground
BEARHAT MOUNTAIN
STANTON MOUNTAIN
7735
RED EAGLE MOUNTAIN
LITTLE CHIEF MOUNTAIN
9559
Ranch
Ranger Station
MOUNT BROWN
Sperry Glacier
CITADEL MOUNTAIN
5188
Mount Brown Lookout
Cabins
Kellys Camp
Lake McDonald
ALMOST-A-DOG MOUNTAIN
Cabin
Campground
SPLIT MOUNTAIN
WALTON MOUNTAIN
Blackfoot Glacier
Pumpelly Glacier
Harrison Glacier
Red Eagle Pass
SNYDER RIDGE
Lake McDonald
Ranger Station
MOUNT THOMPSON
Patrol cabin
BELTON HILLS
6358
MOUNT STIMSON
Harrison Lake
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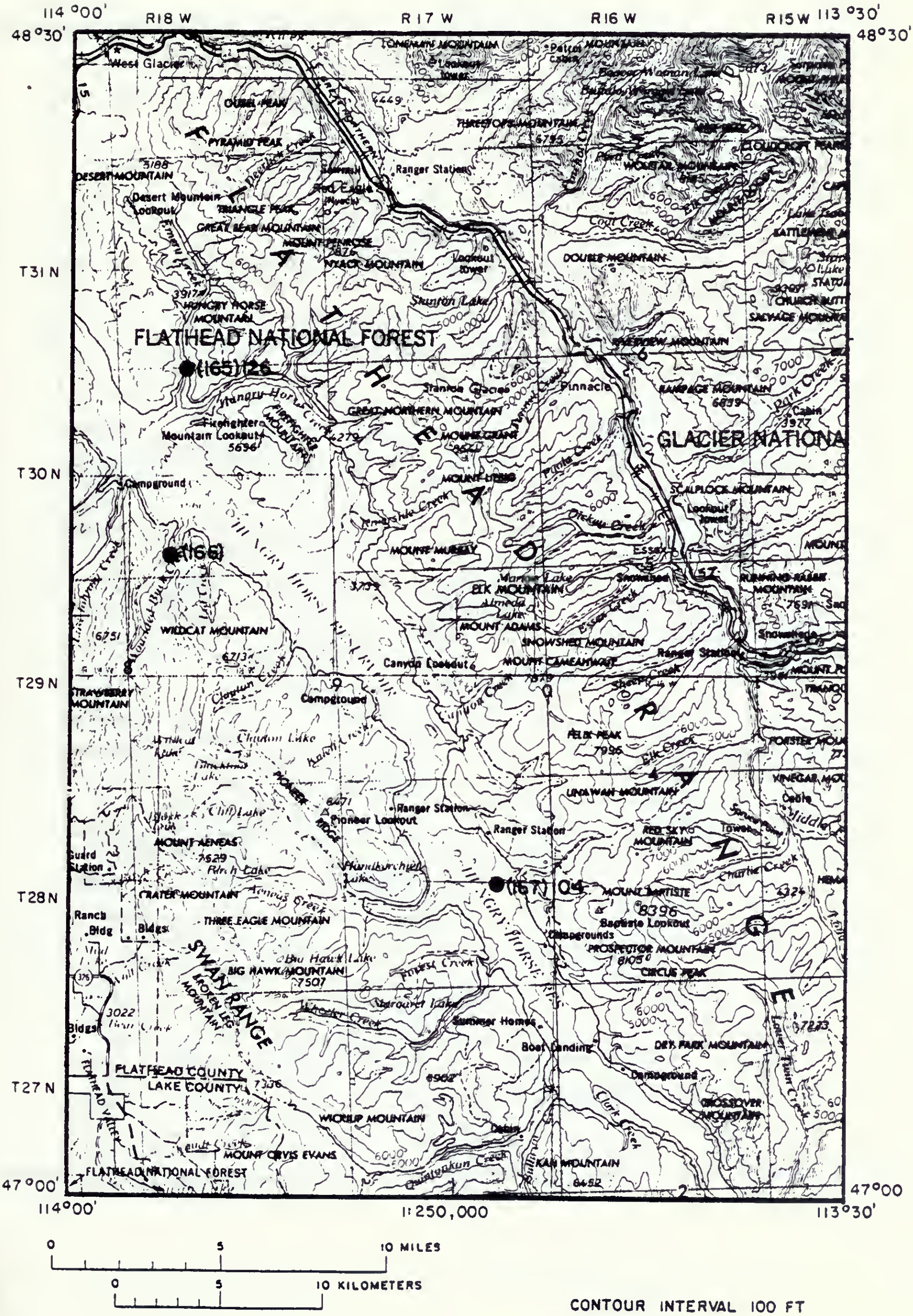
10 KILOMETERS
CONTOUR INTERVAL 100 FT


114°00'
R18 W
R17 W
R16 W
R15 W
113°30'
48°30'
48°30'
West Glacier
DUBEL PEAK
PYRAMID PEAK
DESERT MOUNTAIN
Desert Mountain Lookout
TRIANGLE PEAK
GREAT BEAR MOUNTAIN
MOUNT PENROSE
NYACK MOUNTAIN
Ranger Station
Lookout tower
Stanton Lake
HUNGRY HORSE MOUNTAIN
FLATHEAD NATIONAL FOREST
(165) 126
Stanton Glacier
GREAT NORTHERN MOUNTAIN
Firefighter Mountain Lookout
5696
Pinnacle
THREETOPS MOUNTAIN
DOUBLE MOUNTAIN
Coal Creek
RAMPAGE MOUNTAIN
GLACIER NATIONA
Park Creek
Cabin
SCALPLOCK MOUNTAIN
Lookout tower
Essex
Dickey Creek
Pinto Creek
Campground
(166)
MOUNT MURRAY
ELK MOUNTAIN
Almeda Lake
MOUNT ADAMS
SNOWSHED MOUNTAIN
MOUNT CAMEAHWAIT
Ranger Station
Snowslide
Sheep Creek
WILDCAT MOUNTAIN
Canyon Lookout
Clayton Creek
Campground
Clayton Lake
STRAWBERRY MOUNTAIN
FELIX PEAK
7996
Elk Creek
UNAWAH MOUNTAIN
RUNNING RABBIT MOUNTAIN
VINEGAR MOUNTAIN
Ranger Station
Pioneer Lookout
PIONEER RIDGE
Ranger Station
RED SKY MOUNTAIN
MOUNT AENEAS
7529
Birch Lake
Guard Station
(167) 04
MOUNT BAPTISTE
8396
Baptiste Lookout
Charlie Creek
CRATER MOUNTAIN
THREE EAGLE MOUNTAIN
Campgrounds
PROSPECTOR MOUNTAIN
8105
CIRCUS PEAK
Ranch Bldg
Bldgs
SWAN RANGE
BROKEN LEG MOUNTAIN
Big Hawk Lake
BIG HAWK MOUNTAIN
7507
Forest Creek
Summer Homes
Boat Landing
DRY PARK MOUNTAIN
Campground
CROSSOVER MOUNTAIN
Clark Creek
Bldgs
3022
FLATHEAD COUNTY
LAKE COUNTY
7336
WICKIUP MOUNTAIN
Cabin
MOUNT ORVIS EVANS
KAH MOUNTAIN
6452
Quintonkon Creek
FLATHEAD NATIONAL FOREST
T31 N
T30 N
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T27 N
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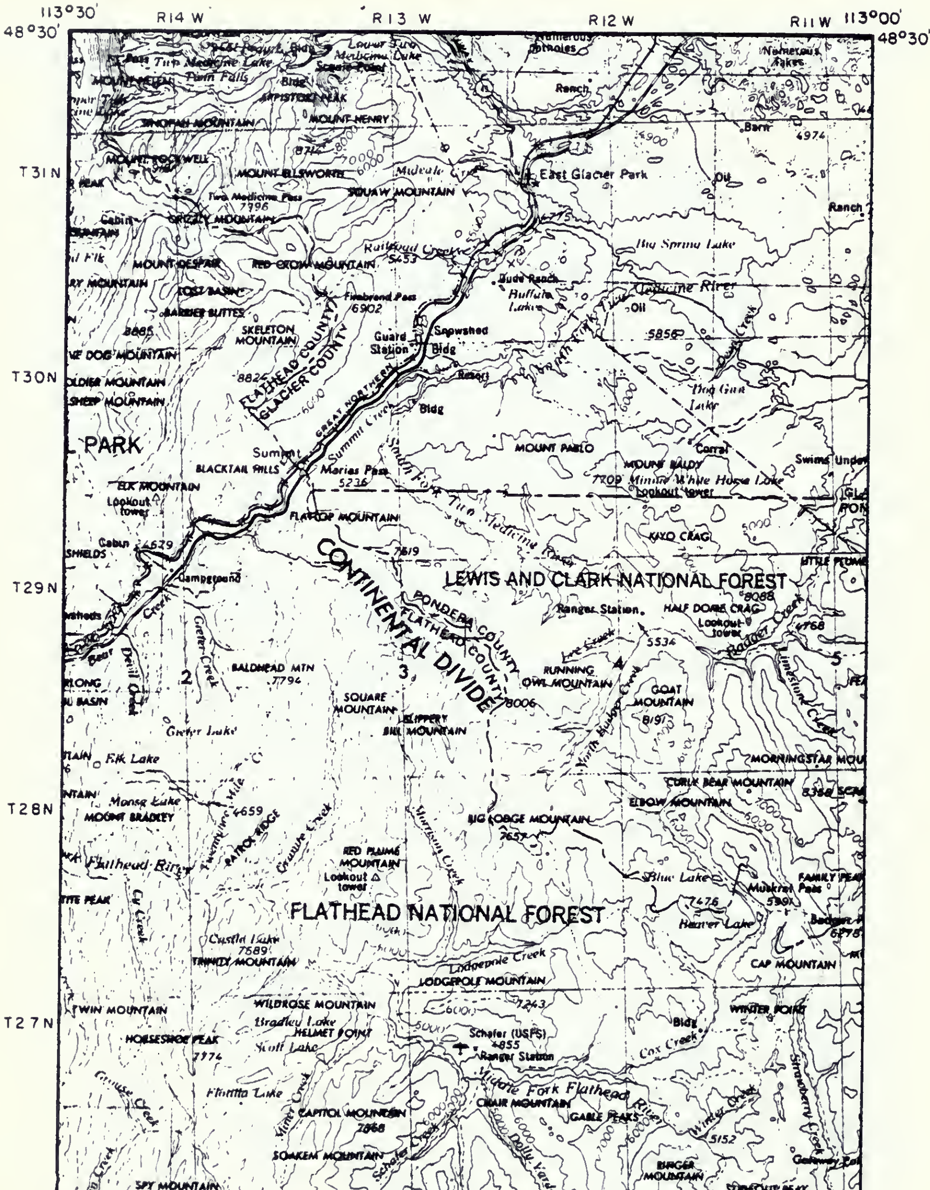
CONTOUR INTERVAL 100 FT



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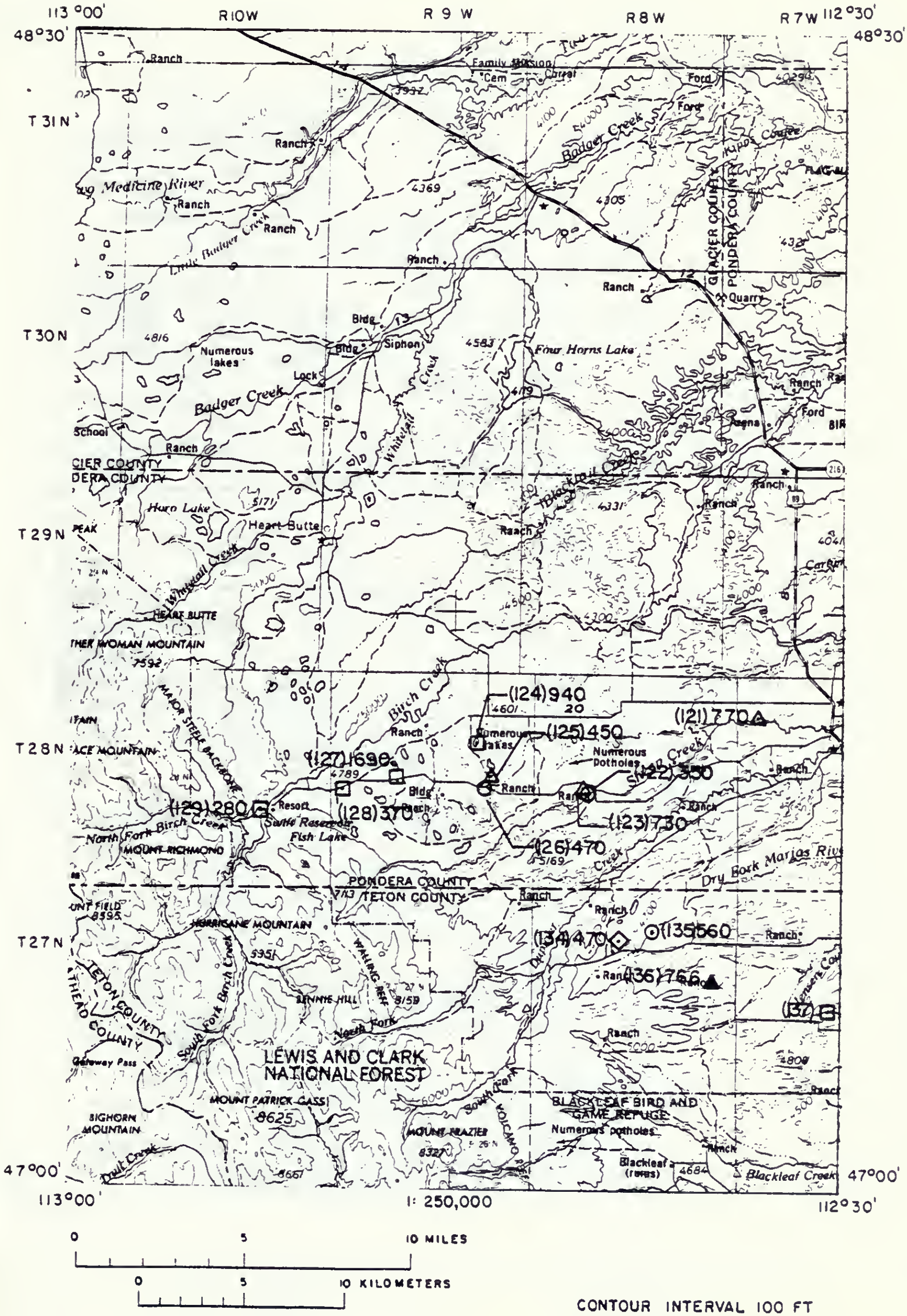
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT


113°00'
R10W
R 9 W
R8W
R7W
112°30'
48°30'
48°30'
T31N
T30N
T29N
T28N
T27N
Badger Creek
Little Badger Creek
Four Horns Lake
Numerous lakes
Heart Butte
HEART BUTTE
Birch Creek
Whitetail Creek
Blacktail Creek
GLACIER COUNTY
PONDERA COUNTY
TETON COUNTY
Dry Fork Marias River
North Fork Birch Creek
MOUNT RICHMOND
MAJOR STEELE BACKBONE
Swift Reservoir
Fish Lake
HURRICANE MOUNTAIN
South Fork Birch Creek
LEWIS AND CLARK
NATIONAL FOREST
MOUNT PATRICK GASS
8625
BLACKLEAF BIRD AND
GAME REFUGE
Numerous potholes
Blackleaf Creek
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(125)450
(121)770
(127)1690
(122)350
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(137)
47°00'
47°00'
113°00'
112°30'
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10 MILES
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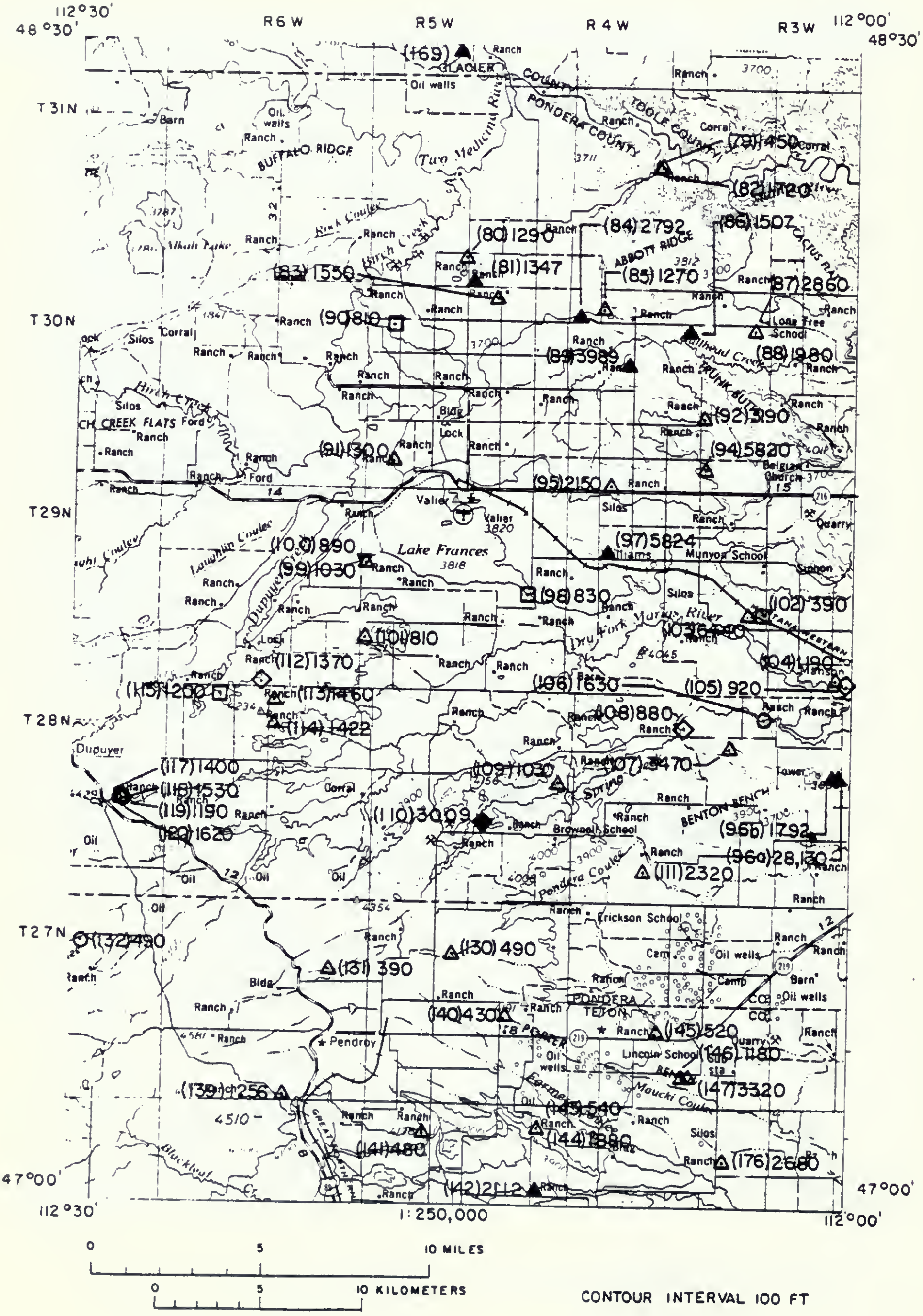
10 KILOMETERS
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

CUT BANK 8



CUT BANK 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	49M0001	Glacier	37N 05W 10 DC	01 21 49	Well	22 gpm (E)	Domestic and stock use			yes	3770	126	142	211VRGL	Swenson, Ralph
2	65M0029	Glacier	37N 05W 07 AD	10 19 65	Well		Domestic and stock use	1800	7.77	yes	4010	25		211TMDC	Lozing, Jacob
3	MBMG19	Glacier	37N 05W 15 DDA		Well		Domestic use except for drinking	2970		no			180		Kruger
4	65M0016	Glacier	37N 05W 15 DA	10 18 65	Well	7 gpm (E)	Domestic and stock use	2700		yes	3750	113	133	211VRGL	Kruger, R.
5	65M0028	Glacier	37N 05W 19 DA	10 19 65	Well		Stock use	3600	6.7	yes	4010	73		211TMDC	Luzing, William
6	66M0019	Glacier	37N 06W 26 CB	10 18 66	Well	15 gpm (E)	Domestic and stock use			yes	3840	171	172	211VRGL	Bunyak, W.
7	65M0027	Glacier	37N 06W 29 DD	10 19 65	Well		Domestic and stock use			yes	3870	42		211TMDC	Jacobsen, Rufina
8	65M0018	Glacier	37N 05W 35 CD	10 15 66	Well		Domestic and stock use			yes	3860	145	185	211VRGL	Bertram, E.
9	65M0022	Glacier	36N 05W 04 AB	10 15 65	Well		Stock use	4000		yes	3910	124		211TMDC	Bilstad, G.
10	40M0001	Glacier	36N 05W 04 DB	02 14 40	Well		Unused			yes	3970			211TMDC	
11	MBMG17	Glacier	36N 05W 09 BC	12 02 76	Well		Stock use	6153	8	yes	3950		130	211TMDC	Bedord, W.
12	MBMG16	Glacier	36N 05W 09 BC	08 25 75	Spring		Stock use	520	22	no	3850				Bedord
13	47M0012	Glacier	36N 06W 12 AC	03 18 47	Well		Industrial use			yes	4130				
14	33M0004	Glacier	36N 06W 02 DA	02 23 33	Well		Unused			yes	4200			211VLCC	
15	54M0005	Glacier	36N 06W 01 DC	03 18 64	Well	250 gpm (E)	Municipal supply			yes	4050	219	475	211VRGL	Town of Sunburst
16	54M0004	Glacier	36N 05W 12 DC	06 21 54	Well	85 gpm (E)	Municipal supply			yes	4080	90	407	211VRGL	Town of Sunburst
17	54M0003	Glacier	36N 06W 13 AA	06 21 54	Well	125 gpm (E)	Municipal supply			yes	4090	299	520	211VRGL	Town of Sunburst
18	64M0009	Glacier	38N 05W 14 BD	10 24 64	Well		Domestic and stock use	1290		yes	4000	8		211TMDC	Gjertson, G.
19	65M0017	Glacier	36N 05W 14 AC	09 24 65	Well	5 gpm (E)	Stock use		8.9	yes	3980	12	450	211VRGL	Gjertson, George
20	MBMG14	Glacier	36N 05W 14 CAAA	08 25 76	Well			1160	18	no	4020		150		Hulverson, B.
21	MBMG15	Glacier	36N 05W 14 DBB	08 25 78	Well		Domestic use	1160	9	no	4020		400		Hulverson, B.
22	MBMG12	Glacier	35N 05W 34 ACBA	08 25 78	Reservoir			8060	21	no	4040				
23	MBMG13	Glacier	36N 05W 34 ACAC	08 25 76	Reservoir			2120	24	no	4040				
24	55M0012	Glacier	34N 06W 20 BB	10 08 66	Well		Stock use		8.3	yes				211VRGL	Rice, G.
25	MBMG10	Glacier	36N 05W 33 CBBC	12 02 78	Well	25 gpm (M)	Domestic and stock use	2213	9.5	yes	4120	30	130	211TMDC	Johnson, R.
26	MBMG11	Glacier	36N 05W 34 DDC	08 25 78	Reservoir			3480	21	no	4080				
27	33M0001	Glacier	36N 06W 04 AA	09 12 33	Well		Unused			yes	4100		280	211VRGL	
28	65M0025	Glacier	35N 05W 02 AA	10 01 65	Well		Domestic and stock use		7.8	yes	4070	14		211TMDC	Hjerterson, Stanley
29	33M0002	Glacier	36N 06W 01 CC	07 18 33	Well		Unused			yes	5000		75	211TMDC	
30	54M0010	Glacier	36N 06W 12 CC	10 24 64	Well		Domestic and stock use	1660	7.8	yes	4110	180		211VLCC	Berger, Ella

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31	MBMG18	Glacier	37N 05W 35 CBDA	08 25 76	Well		Domestic use	2120	21	no		185			Berkram
32	not on map														
33	MBMG8	Glacier	35N 05W 05 DDDD	12 02 76	Well		Domestic and stock use	3177	9	yes	4130		160	211TMDC	Van Alstine, B
34	MBMG9	Glacier	35N 05W 05 DDB	08 25 76	Reservoir		Stock use			no	4090				
35	64M0007	Glacier	35N 05W 07 BB	10 23 64	Well	35 gpm (E)	Industrial use	2050		yes	4140	80	365	211VRGL	Montana Power
36	MBMG7	Glacier	35N 05W 16 CABB	08 25 76	Spring	.5 gpm (E)		7760	13.5	no	3970				
37	64M0011	Glacier	35N 05W 15 DC	10 22 64	Well	4 gpm (E)		1700	8.3	yes	4150		280	211VLCC	Lindberg, Glenn
38	60M0001	Glacier	35N 05W 22 CB	07 22 60	Well		Domestic use	1400		yes	4130	90	328	211RGLC	Montana Power
39	MBMG6	Glacier	35N 05W 21 DADA		Well		Domestic use	1820	15.9	no	4060		110		Montana Power
40	65M0014	Glacier	35N 05W 20 BB	09 28 65	Well		Stock use		7.8	yes	4056		327	211VRGL	Johnson, P.
41	65M0032	Glacier	35N 06W 23 CD	10 09 65	Well		Domestic and stock use			yes	3880	152		211VLCC	Quist, John
42	34M0002	Glacier	35N 06W 14 CB	03 30 34	Well		Unused			yes	3900			211VLCC	
43	33M0003	Glacier	35N 06W 15 BD	05 12 33	Well		Unused			yes	3850			211VLCC	
44	65M0038	Glacier	35N 06W 21 CB	10 22 65	Well		Industrial use			yes	3890		575	211VLCC	Texaco, Inc.
45	not on map														
46	33M0005	Glacier	35N 06W 26 CD	09 16 33	Well		Unused			yes	3870			211VLCC	
47	MBMG5	Glacier	35N 05W 34 BBCB	08 25 76	Well		Domestic use	1610	11.2	no	3980		160		DeZort, Anne
48	65M0015	Glacier	35N 05W 34 AB	09 30 65	Well		Domestic and stock use		6.3	yes	3974	76	101	211VRGL	DeZort, G.
49	64M0004	Glacier	34N 05W 03 BB	10 22 64	Well		Unused, former school well	810	7.8	yes	3880	48	72	211VRGL	
50	65M0013	Glacier	34N 05W 03 CC	10 16 65	Well		Domestic and stock use		6.9	yes	3910	100	201	211VRGL	Fugle, D.
51	MBMG3	Glacier	34N 05W 03 CCCC	08 25 76	Well		Domestic and stock use	1920	18	no	3890				Fugle, Don
52	MBMG2	Glacier	34N 05W 09 AAAA	08 25 76	Well		Domestic use	720	13.2	no	3880		175		Fugle, Dick
53	65M0020	Glacier	32N 05W 11 DD	10 15 65	Well	5 gpm (E)	Domestic use			yes	3800	175	185	211VRGL	Dreder, E;
54	33M0006	Glacier	34N 06W 11 BA	03 14 33	Well		Unused			yes	3790			211TMDC	
55	65M0033	Glacier	34N 06W 12 CC	10 14 65	Well		Domestic use			yes	3810	91			Vermulum, Hermen
56	65M0024	Glacier	34N 06W 14 BC	10 05 65	Well					yes	3790	94		211TMDC	Bittner, R.
57	65M0010	Glacier	34N 06W 14 DD	10 05 65	Well		Domestic use		7.8	yes	3800	190	202	211VRGL	Haglund, G.
58	32M0001	Glacier	34N 06W 24 DA	11 07 32	Well					yes	3790		230	211VRGL	
59	65M0037	Glacier	34N 05W 20 BB	10 08 65	Well				6.3	yes	3790		124		Rice, G.
60	MBMG1	Glacier	34N 05W 27 BBCD	08 25 76	Reservoir			180	16.5	no	3800				Peterson, E. O.

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61	64M0006	Glacier	34N 05W 29 DA	10 20 64	Well		Domestic and stock use	1420	8.3	yes	3750	57	160	211VRGL	Tomscheck, Harlod
62	65M0009	Glacier	34N 05W 36 DC	10 23 65	Well		Domestic and stock use			yes	3860	98	137	211VLCC	Luedtke, V
63	MBMG4	Glacier	36N 05W 34 BBCB	08 25 76	Well		Domestic use	1090	13	no	3980		140		Dezort, Anna
64	76M0234	Glacier	34N 07W 06 ABAA	04 13 76	Well		Saline seep test area - Jolliffe	2490	4.0	yes	3870	6	27	112GLCC	Jolliffe
65	64M0001	Glacier	33N 05W 03 DC	10 24 64	Well		Domestic and stock use			yes	3880	171	120	211VRGL	Peoples, E. J.
66	49M0002	Glacier	33N 06W 12 AA	03 19 49	Well		Municipal supply			yes	3750		238		City of Cut Bank
67	64M0013	Glacier	33N 06W 12 AA	08 26 64	Well		Municipal supply			yes	3750		238		City of Cut Bank
68	64M0012	Glacier	33N 06W 12 AA	06 03 64	Well		Municipal supply			yes	3750		238		City of Cut Bank
69	65M0036	Glacier	33N 06W 12 AA	09 01 65	Well		Municipal supply		8.3	yes	3750		238		City of Cut Bank
70	59M0002	Glacier	33N 06W 12 AA	01 29 59	Well		Municipal supply			yes	3750		238		City of Cut Bank
71	59M0001	Glacier	33N 06W 02 CA	01 29 59	Well					yes	3680				
72	36M0002	Glacier	33N 06W 10 BB	08 24 36	Well		Unused			yes	3810			211TMDC	
73	65M0026	Glacier	33N 06W 11 BD	10 23 65	Well		Domestic use			yes	3670			211VLCC	Brenner Services
74	64M0002	Glacier	33N 05W 21 BB	10 26 64	Well	80 gpm (E)	Industrial	1600	10.6	yes	3890	270	311	211VLCC	Union Oil Company
75	64M0003	Glacier	33N 05W 21 DA	10 12 64	Well			1680	12	yes	3880	240	286	211VRGL	Christopherson, W.
76	36M0003	Glacier	33N 06W 25 CB	06 21 36	Well		Unused			yes	3600			211CLRD	
77	37M0002	Glacier	32N 06W 01 AC	03 17 37	Well					yes	3720	250		211TMDC	
78	34M0001	Glacier	32N 06W 10 DB	05 26 34	Well			1018		yes	3880		290	211VRGL	
79	MBMG31	Pondera	31N 04W 16 ADC	08 26 76	Well	6 gpm (M)	Domestic and stock use	1450	14.5	no	3250	flowing	40		Lane
80	MBMG30	Pondera	31N 06W 33 AAA	08 26 76	Well		Domestic use	1290	11.6	no	3620		60		Stark
81	MBMG29	Pondera	31N 05W 34 CCC	12 07 76	Well		Domestic and stock use	1347		yes	3610	100	140	211VRGL	
82	MBMG32	Pondera	31N 04W 16 ACC	08 26 76	Well		Stock use	1720	10.9	no	3270	flowing			Lane
83	MBMG28	Pondera	30N 05W 03 ADAA	08 26 76	Well		Domestic use	1560	10	no	3650				Yeagher, Connely
84	76M1469	Pondera	30N 04W 06 CDBB	12 06 76	Well	10 gpm (E)	Stock use, saline seep project sample 88	2792	9	yes	3600		7	211TPCK	Eppe, L.
85	MBMG33	Pondera	30N 04W 05 CBC	08 26 76	Well		Domestic use	1270	10	no	3600		40		Slezak
86	76M1470	Pondera	30N 04W 10 ABBB	12 06 76	Well	6 gpm (E)	Domestic and stock use	1507	7.0	yes	3580		90	211TPCK	Nelson, J.
87	MBMG38	Pondera	30N 04W 12 AB	08 26 76	Well		Stock use	2860	16	no	3620		60		Newmiller, Ray
88	MBMG37	Pondera	30N 04W 12 ABB	08 26 76	Well		Domestic use, water has a sulphur smell	1980	13	no	3620		160		Newmiller, Ray
89	76M1476	Pondera	30N 04W 17 AAAA	12 08 76	Well	10 gpm (E)	Domestic use	3989	8	yes	3580		66	211TPCK	Raines, Vance
90	MBMG27	Pondera	30N 06W 07 AADD	08 26 76	Reservoir		Shallow reservoir	810	13	no	3710				Widhlem, Andrew

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91	MBMG26	Pondera	30N 05W 31 AADD	08 26 76	Well			1300	12.8	no	3810		125		Olson, Roy
92	MBMG38	Pondera	30N 04W 23 CCC	08 26 76	Well	3.5 gpm	Stock and domestic use except for drinking	3190	14	no	3760		120		Van Auken, Al
93	Not on map														
94	MBMG35	Pondera	30N 04W 35 BCBB	08 26 76	Well		Stock and domestic use except for drinking	5820	18	no	3780				Atkin, Russ
95	MBMG34	Pondera	30N 04W 32 CDD	08 26 76	Well		Domestic use	2160	12	no	3280				Brophy
96A	76M0246	Pondera	28N 03W 17 AABB	04 14 76	Well		Bokma test well C27 - B011 - 74	28130	9.0	yes	3580	20	64	112TILL	Bokma
96B	76M0245	Pondera	28N 03W 17 ABDB	04 14 76	Well		Bokma test well C19 - B03 - 74	1782	7.0	yes	3600	6	34	112TILL	Bokma
97	MBMG21	Pondera	29N 04W 08 CCD	12 07 76	Well		Domestic use	5824	18	yes	3890		108	211VRGL	Boumans, Joe
98	MBMG20	Pondera	29N 05W 23 AAA	08 28 76	Lake		Lake Frances	830	17	no	3820				
99	MBMG19	Pondera	29N 05W 18 BBBB	08 26 76	Well		Domestic use	1030	13	no	3830		15		Kuka, Robert
100	MBMG18	Pondera	29N 05W 18 BBC	08 26 76	Canal	120 gpm		890	11.3	no	3830				
101	MBMG17	Pondera	29N 05W 30 BC	08 26 76	Well		Domestic use	810	11.5	no	4050		90		Vandenvos, Bill
102	MBMG23	Pondera	29N 04W 24 DAA	08 26 76	Reservoir			380	15.8	no	3620				Habets, Jerry
103	MBMG22	Pondera	29N 04W 24 DBB	08 26 76	Well		Domestic use except for drinking	6440	12	no	3600		12		Habets, Jerry
104	MBMG47	Pondera	29N 03W 33 CBC	08 28 76	Well		Domestic use	1190	17	no	3470				De Vries
105	MBMG48	Pondera	29N 03W 33 CAC	08 28 76	Spring		Domestic use	920	18	no	3460				De Vries
106	MBMG24	Pondera	28N 04W 01 DBAA	08 26 76	Creek	8 gpm	South Fork Marias River	1630	11.5	no	3580				Warwick
107	MBMG25	Pondera	28N 04W 11 ACAD	08 26 76	Well			3470	14	no	3700				
108	MBMG49	Pondera	28N 04W 03 C	08 26 76	Spring		Domestic use	880	10	no	3720				Graham, Alistair
109	MBMG50	Pondera	28N 05W 13 AC	08 26 76	Well	>60 gpm	Domestic use	1030	7	no	3860	25	220		Gernaet, John
110	MBMG51	Pondera	28N 05W 22 CA	12 07 76	Spring	30 gpm	Stock use	3009	9.0	yes	4020			211VRGL	Fisher, G.
111	MBMG52	Pondera	28N 04W 33 BB	08 26 76	Well		Stock and irrigation use	2320		no	4200				Schultz, Clide
112	MBMG16	Pondera	29N 06W 34 CCD	08 26 76	Spring		Stock use	1370	11.1	no	4080				
113	MBMG15	Pondera	28N 06W 03 BBD	08 26 76	Well		Domestic use	1460	7.9	no	4130		90		Fields, C. W.
114	76M1472	Pondera	28N 06W 03 C	12 07 76	Well		Domestic and stock use	1422	12	yes	4130		90	211TDMC	Fields, C. W.
115	MBMG14	Pondera	28N 06W 05 ABD	08 26 76	Pond			1200	10	no	3970				
116	not on map														
117	MBMG10	Pondera	28N 07W 23 ABD	08 26 76	Reservoir			1400	10	no	4160				De Roze, J. F.
118	MBMG11	Pondera	28N 07W 23 ABA	08 26 76	Well		Domestic use	1530	10.6	no	4230		33		
119	MBMG12	Pondera	28N 07W 23 ABD	08 26 76	Well		Stock use	1190	9	no	4230		100		

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120	MBMG13	Pondera	28N 07W 23 ABD	08 26 76	Spring			1820	10	no	4180				
121	MBMG8	Pondera	28N 07W 06 DCCC	08 26 76	Well		Domestic use	770	14.5	no	4210				Shepard
122	MBMG7	Pondera	28N 08W 20 ABDD	08 26 75	Creek	15 gpm		350	12.3	no	4430				
123	MBMG6	Pondera	28N 08W 20 ABDD	08 26 76	Well	4 gpm	Domestic use	730	15.8	no	4430		12		Tanaffero, Mark
124	MBMG9	Pondera	28N 09W 11 CCB	08 26 76	Reservoir		Shallow reservoir	940	9	no	4610				
125	MBMG5	Pondera	28N 08W 14 DCDB	08 26 76	Well		Domestic use	450	12.5	no	4570				Lindseth, A B
126	MBMG4	Pondera	28N 09W 23 BAAD	08 26 75	Creek	12 gpm	Sheep Creek	470	11.8	no	4550				
127	MBMG3	Pondera	28N 09W 17 DCD	08 26 76	Reservoir			1690	12	no	4710				
128	MBMG2	Pondera	28N 09W 19 BBDD	08 26 76	Lake		Coty Lake	370	12	no	4700				
129	MBMG1	Pondera	28N 10W 22 DDD	08 26 78	Reservoir		Swift Reservoir	280	12	no	4980				
130	MBMG14	Teton	27N 05W 09	08 26 76	Well		Domestic use, water has a sulphur smell	490	14	no	4250		100		Brownell
131	MBMG13	Teton	27N 06W 14 AAAA	08 25 76	Well		Domestic use	390	11	no	4230		120		Wellenstien
132	MBMG7	Teton	27N 07W 10 ABD	08 25 76	Creek	1 cfs	Jensen Coulee	490	18	no	4270				
133	not on map														
134	MBMG5	Teton	27N 08W 09	08 25 76	Spring		Domestic use	470	10.5	no	4770				Den Boer, Albert
135	MBMG6	Teton	27N 08W 10	08 25 78	Creek	5 cfs	Middle Fork Dry Fork Marias River	560	18.5	no	4600				
136	MBMG4	Teton	27N 08W 13 CDD	01 18 77	Well			766	74	yes	4570		12	211TMDC	McCraket, Dave
137	MBMG3	Teton	27N 07W 21 DDBB	04 25 78	Reservoir		Stock reservoir			no	4470				
138	not on map														
139	MBMG8	Teton	27N 06W 34 DCBC	01 18 77	Well	11 gpm	Domestic and stock use	1256	14	yes	4150	90	135	211TPCK	Halvorsen
140	MBMG15	Teton	27N 05W 23 BCCC	08 25 78	Well		Domestic use	430	14	no	4080		20		Hanson
141	MBMG37	Teton	26N 05W 05 DDC	08 25 76	Well		Domestic use	480	12	no	4200	8	15		Swanson
142	MBMG40	Teton	26N 05W 13 CBBB	01 17 77	Well		Domestic use	2112	11	yes	3840	35	56	211CLRD	Agee, H
143	MBMG38	Teton	26N 06W 01 CBC	08 25 78	Well		Domestic use	540	15	no	4000	8	10		Rice, Don
144	MBMG39	Teton	26N 06W 01 CBC	08 25 76	Well	15 gpm	Irrigation and stock use	1880	9	no	4000	30	70		Rice, Don
145	MBMG16	Teton	27N 04W 21 DCCC	08 25 78	Well	12 gpm	Domestic use	620	12	no	4000	4	36		Christensen
146	MBMG17	Teton	27N 04W 34 BAA	08 25 76	Well		Domestic use	1180	13	no	3960	10	20		Skelton
147	MBMG18	Teton	27N 04W 34 AB	08 25 78	Well		Unused, formerly used for stock	3320	14	no	3900				
148	not on map														
149	76M1463	Glacier	36N 06W 13 AD	12 04 76	Well			1484	21	yes			490	211VRGL	Chester, Ken

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150	75M1456	Toole	37N 04W 02 DDC	12 02 78	Well	8 gpm (E)	Saline seep research well	4186	9	yes	3640		118	211VRGL	Buckley, Pat
151	76M1458	Toole	37N 03W 30 ACC	12 03 75	Well	10 gpm (E)	Saline seep research well	3012	10	yes	3830		168	211VRGL	Sveum, Martin
152	76M1457	Toole	37N 03W 21 ACB	12 03 78	Well	10 gpm (E)	Domestic use, saline seep research well	5874	8.0	yes	3680		115	211VRGL	Kelleher
153	65M0005	Toole	37N 03W 21 DB	10 20 65	Well		Stock use		7.8	yes	3720	84	117	211VRGL	Dye, Junie
154	65M0002	Toole	37N 04W 27 CB	10 22 65	Well		Domestic use			yes	3800	135	170	211VRGL	Boxwell, Alvin
155	54M0001	Toole	36N 04W 14 AB	02 10 54	Well	250 gpm (E)	Municipal supply			yes	3980	89	159	211VRGL	Town of Sunburst
156	54M0002	Toole	36N 04W 14 AA	09 08 54	Well	75 gpm (E)	Unused			yes	4030	117	174	211VRGL	Town of Sunburst
157	65M0007	Toole	36N 04W 14 AC	06 30 65	Well				7.8	yes	4020	141	165	211VRGL	Town of Sunburst
158	65M0003	Toole	36N 03W 19 CCA	10 21 65	Well		Stock use			yes	4060	115	150	211VRGL	Gillespie, E
159	65M0039	Toole	36N 04W 14 AC	06 30 65	Well		Municipal supply		7.8	yes	4020		165		Town of Sunburst
160	65M0023	Toole	36N 04W 22 DC	10 20 65	Well		Stock use			yes	4200	118		211TMDC	Gillespie, E.
161	65M0004	Toole	36N 04W 35 AB	09 24 65	Well		Unused		7.8	yes	4170	125	225	211VRGL	Big West Oil Co
162	65M0033	Toole	35N 04W 11 DD	10 22 65	Well		Stock use	1600	8.3	yes	3860			211VRGL	Goeddertz, A.
163	65M0035	Toole	33N 04W 31 BD	09 23 65	Well		Stock use	1610		yes	3680		120		Peoples, E.
164	64M0008	Toole	32N 04W 28 AB	10 16 64	Well		Domestic use	900	8.3	yes	3760	36	150	211VRGL	Hjartarson, Jadar
165	76M1684	Flathead	30N 18W 17 DCBC	04 08 77	Creek	136 cfs (M)	Emery Creek	125	1	yes	3600				
166	76M1686	Flathead	29N 18W 17 BCBC	04 11 77	Creek	572 cfs (M)	Wounded Buck Creek	214	4	yes	3580				
167	76M1685	Flathead	27N 17W 02 DA	04 11 77	Creek	93 cfs (M)	South Fork Logan Creek	104	2	yes	3680				
168	64M0005	Glacier	36N 05W 05 DD	10 23 64	Well		Domestic and stock use	3000	8.3	yes	3840	200	327	211VRGL	Van Alstine, William
169	65M0030	Glacier	32N 05W 28 DC	10 23 65	Well				8.1	yes	3580				
170	37M0001	Glacier	33N 06W 10 BB	03 17 37	Well		Unused			yes	3810			211TMDC	
171	00M0006	Glacier	32N 06W 01 AC		Well					yes	3720	250		211TMDC	
172	00M0008	Glacier	33N 06W 25 CB		Well					yes	3600			211CLRD	
173	65M0011	Glacier	34N 05W 31 CD	10 26 65	Well		Domestic use			yes	3730	27	164	211VRGL	Kennedy, Brady
174	00M0009	Glacier	34N 06W 11 BA		Well					yes	3790			211TMDC	
175	00M0007	Glacier	36N 05W 04 DB		Well		Unused			yes	3870			211TMDC	
176	MBMG19	Teton	26N 04W 11 DBC	08 25 78	Well		Stock use	2680		no	3830	16	48		Mocherdt, H.
177	65M0006	Toole	37N 03W 04 AD	08 04 65	Well			1780		yes	3610	47	186	211VRGL	
178	65M0008	Toole	37N 04W 12 DB	10 20 65	Well					yes			60	211VLLC	
179	00M0010	Toole	36N 04W 11 DD		Well			1600	8.9	yes	3860			211VRGL	Goeddertz
180	65M0012	Glacier	34N 05W 20 BB	10 08 65	Well				8.33	yes	3770	87	124	211VRGL	Rice, Gordon

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo Day Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
1	37N 05W 10 DC	01 21 48	Well	47	31	543*					799	18	48	641
2	37N 05W 07 AD	10 19 65	Well	8	2	450*					610	66	26	388
4	37N 05W 15 DA	10 18 65	Well	70	71	495*					268		33	795
5	37N 06W 19 DA	10 19 65	Well	156	89	925*		18.4			1037		34	1780
6	37N 05W 26 CB	10 18 65	Well	4	1	368*					583	39	10	242
7	37N 05W 29 DD	10 19 65	Well	90	78	725*		13.6			1060		20	1185
8	37N 05W 35 CD	10 15 65	Well	62	70	68*					268		114	200
9	36N 05W 04 AB	10 15 65	Well	14	44	1130*					630	45	33	1650
10	36N 05W 04 DB	02 14 40	Well	73	30	2866*					5760		1296	
11	36N 06W 09 BC	12 02 76	Well	130	62.8	1100	5.2	.88	.18	7.7	903		32	2200
13	36N 06W 12 AC	03 18 47	Well	43	62	2736*					2825	296	1782	951
14	36N 06W 02 DA	02 23 33	Well			548*					575	37	129	464
15	36N 05W 01 DC	03 18 54	Well	3	5						506	65	23	257
16	36N 05W 12 DC	06 21 54	Well	2	4	366*		.12			488	42	12	216
17	36N 05W 13 AA	06 21 54	Well	1	2	430*		.22			614	54	38.5	38.5
18	36N 05W 14 BD	10 24 64	Well	8		322*		.24			540	21	15	218
19	36N 05W 14 AC	09 24 66	Well	2		221*		3.30			370	57	16	43
24	34N 06W 20 BB	10 06 65	Well											
25	36N 05W 33 CBBC	12 02 76	Well	220	107	162	6.3	1.19	.43	9.2	362		52	952
27	35N 06W 04 AA	09 12 33	Well			796*					620	42	83	997
28	35N 05W 02 AA	10 01 85	Well	62	28	86*		1.64			384	15	9	97
29	35N 05W 01 CC	07 18 33	Well			844*					965		52	932
30	35N 05W 12 CC	10 24 64	Well	4		421*					874	9	26	308
33	35N 05W 06 DDDD	12 02 76	Well	5.9	1.7	771*	1.7	.04	< .01	6.6	749	9.6	30	967
35	35N 05W 07 BB	10 23 64	Well	4		550*		.14			740	24	29	486
37	35N 05W 15 DC	10 22 64	Well	4		439*					677	16	22	340
38	35N 05W 22 CB	07 22 60	Well			422*					585	59	29	288
40	35N 05W 20 BB	09 28 65	Well	166	97	1020*		3.70			650		39	2330
41	35N 06W 23 CD	10 09 65	Well	8	5	950*		.10			653	18	40	1420
42	35N 06W 14 CB	03 30 34	Well			553*					785		109	391
43	35N 06W 15 BD	05 12 33	Well	19		1162*		19			640	24	48	1863
44	35N 06W 21 CB	10 22 65	Well	34	13	2120*		.30			265		3200	10
46	36N 06W 26 CD	09 16 33	Well			386*					665		14	288
48	35N 05W 34 AB	09 30 65	Well	46	56	106*					450			161
49	34N 05W 03 BB	10 22 64	Well	51	17	128*		8.60			393		8	135
50	34N 05W 03 CC	10 16 65	Well	14	9	385*					756	63	94	60
53	32N 05W 11 DD	10 16 65	Well	34	27	325*					548		9	418
54	34N 06W 11 BA	03 14 33	Well	35		4289*					1685		5667	
55	34N 06W 12 CC	10 14 65	Well	78	35	555*		.14			550	30	43	937
56	34N 06W 14 BC	10 05 65	Well	4	1	420*					717	45	18	229
57	34N 06W 14 DD	10 05 65	Well	34	18	570*		.80			706		116	623
58	34N 06W 24 DA	11 07 32	Well			670*					755		89	637
59	34N 05W 20 BB	10 08 65	Well	90	45	181*		1.32			494		15	378
61	34N 05W 29 DA	10 20 64	Well	51	53	184*		2.24			372		11	404
62	34N 05W 35 DC	10 23 65	Well	370	372	492*		6.40			226		80	2880

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
1							245	685		USGS	142	211VRGL	No	49M0001
2	.407	1.1		7.77	1800		25	610		USGS		211TMDC	No	65M0029
4		.8			2700		468	220		USGS	133	211VRGL	No	65M0016
5	.361	1.2		6.7	3500		775	851		USGS		211TMDC	No	65M0028
6		1.0					15	543		USGS	172	211VRGL	No	65M0019
7	.113	.8					545	869		USGS		211TMDC	No	65M0027
8		.2					440	220		USGS	185	211VRGL	No	65M0018
9	.520	1.3			4000		215	592		USGS		211TMDC	No	65M0022
10							306	4720		USGS		211TMDC	No	40M0001
11	<.023	.7	7.62	8	5153	3984	583	741	19.8	MBMG	130	211TMDC	Yes	76M1456
13							383	2810		USGS			No	47M0012
14								533		USGS		211VLCC	No	33M0004
15							28	523		USGS	475	211VRGL	No	54M0005
16							21	470		USGS	407	211VRGL	No	54M004
17							11	594		USGS	520	211VRGL	No	54M0003
18		1.1			1290		20	478		USGS		211TMDC	No	64M0009
19		.6		8.9			5	399		USGS	450	211VRGL	No	65M0017
24				8.3								211VRGL	No	
25	<.023	.3	7.43	9.5	2213	1689	990	297	2.2	MBMG	130	211TMDC	Yes	76M1454
27								579		USGS	280	211VRGL	No	33M0001
28		.4		7.8			270	340		USGS		211TMDC	No	65M0025
29								791		USGS	75	211TMDC	No	33M0002
30		2.0		7.8	1550		10	568		USGS		211VLCC	No	64M0010
33	.047	1.7	8.35	9	3177	2164	22	630	72.0	MBMG	160	211TMDC	Yes	76M1453
35					2050		10	647		USGS	365	211VRGL	No	64M0007
37	.090	1.9		8.3	1700		10	580		USGS	280	211VLCC	No	64M0011
38					1400			576		USGS	326	211RGLC	No	60M0001
40		1.5		7.8			810	533		USGS	327	211VRGL	No	65M0014
41	950	3.7					40	566		USGS		211VLCC	No	65M0032
42								644		USGS		211VLCC	No	34M0002
43							47	565		USGS		211VLCC	No	33M0003
44		1.6					140	217		USGS	575	211VLCC	No	65M0038
45								546		USGS		211VLCC	No	33M0005
48				8.3			345	369		USGS	101	211VRGL	No	65M0015
49		.3		7.8	810		199	322		USGS	72	211VRGL	No	64M0004
50		2.9		8.9			70	725		USGS	201	211VRGL	No	65M0013
53		.9					195	449		USGS	185	211VRGL	No	65M0020
54							87	1380		USGS		211TMDC	No	33M0006
55		1.3					340	501		USGS		211TMDC	No	65M0033
56		7.5					15	663		USGS		211TMDC	No	65M0024
57		1.6		7.8			160	581		USGS	202	211VRGL	No	65M0010
58								619		USGS	230	211VRGL	No	32M0001
59		.4		8.3			410	405		USGS	124		No	65M0037
61		.5		8.3	1420		347	305		USGS	160	211VRGL	No	64M0006
62		1.4					2450	185		USGS	137	211VLCC	No	65M0009

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo Day Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride Chloride (Cl)	Sulfate (SO_4)
64	34N 07W 06 ABAA	04 13 76	Well	94	49	448*	14	.25	.60	6.4	454		52	1018
65	33N 05W 03 DC	10 24 64	Well	102	81	220*		.80			360		21	705
66	33N 06W 12 AA	03 19 49	Well	316	43	358*		.2			580			549
87	33N 06W 12 AA	08 26 64	Well	90	62	623*					583		66	1220
68	33N 06W 12 AA	06 03 64	Well	101	73	735*		.14			600		53	1510
69	33N 06W 12 AA	09 01 65	Well	108	125	1375*					450	9	106	3090
70	33N 06W 12 AA	01 29 59	Well	50	56	271*		.7			566		21	437
71	33N 06W 02 CA	01 29 58	Well	47	35	24*					226		4	117
72	33N 06W 10 BB	08 24 36	Well	51		255*					440		38	295
73	33N 06W 11 BD	10 23 65	Well	18	40	565*		.54			427	33	45	927
74	33N 05W 21 BB	10 26 64	Well	18	21	397*					475	33	58	452
75	33N 05W 21 DA	10 12 64	Well	74	55	266*		.20			543		14	500
76	33N 06W 25 CB	05 21 36	Well	200		6641*					720		10150	33
77	32N 06W 01 AC	03 17 37	Well			548*					600	50	116	436
78	32N 05W 10 DB	05 26 34	Well			406*					620	67	31	210
81	31N 06W 34 CCC	12 07 76	Well	.91	66.8	130	3	.09	.01	9.3	504		10.5	331
84	30N 04W 06 CDBB	12 06 76	Well	230	188	210	6.7	.16	.02	8.0	396		32	1327
88	30N 04W 10 ABBB	12 06 76	Well	53	30.8	249	3.8	1.31	.06	9.2	451		25.5	399
89	30N 04W 17 AAAA	12 08 76	Well	72	68.2	825	8	1.10	.03	9.2	1140		53	1172
96A	28N 03W 17 AABB	04 14 76	Well	474	3470	4720	46	.22	.20	10.8	1039		762.5	22110
96B	28N 03W 17 ABDB	04 14 76	Well	141	132	190	6	.04	.01	2.0	163		60	1023.6
97	29N 04W 08 CCD	12 07 76	Well	145	76.4	1280	7	.13	.03	9.4	948		67	2463
110	28N 05W 22 CA	12 07 76	Spring	306	172	230	5.6	.09	.01	10.7	511		28	1366
114	28N 06W 03 C	12 07 76	Well	11.2	13.3	210	3.1	.05	<.01	9.4	569		39.5	167
136	27N 06W 13 CDD	01 18 77	Well	.7	.2	175	.4	.02	<.01	7.5	307	72	8.0	7.2
139	27N 06W 34 DCBC	01 18 77	Well	1.4	.5	324	1.2	.01	<.01	7.1	742	28.8	16	15.3
142	26N 06W 13 CBBB	01 17 77	Well	70	165	220	1.9	.05	.02	10.7	508		59	748
149	36N 06W 13 AD	12 04 76	Well	.8	.9	385	1.0	.03	<.01	6.7	941	38.4	14.5	.1
150	37N 04W 02 DDC	12 02 76	Well	62.5	32.8	935	4.2	.09	.02	7.1	633		29	1701
161	37N 03W 30 ACC	12 03 76	Well	82.4	72	560	3.8	.01	.02	6.1	607		22	1137
152	27N 03W 21 ACB	12 03 76	Well	43.2	46.4	1420	5.3	.04	.01	7.3	1524		8.0	2123
153	37N 03W 21 DB	10 20 65	Well	100	71	480*		2.14			600		16	1022
154	37N 04W 27 CB	10 22 65	Well	4		432*		.22			674	57	8	280
165	36N 04W 14 AB	02 10 54	Well	70.1	46.7	124.9*		.4			463		10	231.2
166	36N 04W 14 AA	09 06 54	Well	56	41	170*		1			488		11	247
157	36N 04W 14 AC	06 30 65	Well	28	41	259*		.24			412		9	430
158	36N 03W 19 CAA	10 21 65	Well	24	42	50*		19			293	12	7	69
159	36N 04W 14 AC	06 30 66	Well	28	41	259*		.24			412		9	430
160	36N 04W 22 DC	10 20 65	Well	68	62	138*		1.36			342		16	392
161	36N 04W 35 AB	09 24 65	Well	32	37	151*		5.72			427		8	190
162	35N 04W 11 DD	10 22 65	Well	64	28	307*		2.20			442		6	546
163	33N 04W 31 BD	09 23 65	Well	12	13	333*		7.48			317		27	470
164	32N 04W 28 AB	10 16 04	Well	46	48	90*		.34			250	9	22	264
165	30N 18W 17 DCBC	04 08 77	Creek	15.8	6.3	1.4	.5	.01	<.01	6.4	78		1.1	3.1
166	29N 18W 17 BCBC	04 11 77	Creek	34.7	7.2	1.2	.3	.03	<.01	4.3	134		2.5	2.5

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters (Con't.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
64	.045	.2	7.30	4.0	2490	1906	438	372	9.3	MBMG	27	112GLCC	Yes	76M0234
65		.7					587	295		USGS	120	211VRGL	No	64M0001
66							966	478		USGS	238		No	49M0002
67	.249	1.0					480	478		USGS	238		No	64M0013
68	.158	.7					562	492		USGS	238		No	64M0012
69		1.4		8.3			785	384		USGS	228		No	65M0038
70	.09	.4					355	455		USGS	238		No	59M0002
71	.090	.1					260	185		USGS			No	59M0001
72							127	424		USGS		211TMDC	No	36M0002
73		1.7					210	405		USGS		211VLCC	No	65M0026
74		.8		10.6	1600		133	445		USGS	311	211VLCC	No	64M0002
75		.8		12	1680		408	445		USGS	285	211VRGL	No	64M0003
76							499	591		USGS		211CLRD	No	36M0003
77							400	575		USGS		211TMDC	No	37M0002
78					1019			620		USGS	290	211VRGL	No	34M0001
81	2.71	.3	7.58	8.0	1347	893	502	413	2.5	MBMG	140	211VRGL	Yes	76M1471
84	14.46	.2	7.67	9.0	2792	2212	1350	325	2.5	MBMG	7	211TPCK	Yes	76M1469
88	.025	.3	7.78	7	1507	994	258	370	6.7	MBMG	90	211TPCK	Yes	76M1470
89	.057	.2	7.61	8	3989	2770	460	935	16.7	MBMG	66	211TPCK	Yes	76M1478
96A	234.946	.7	7.81	9	28130	32340	15500	853	18.5	MBMG	54	112TILL	Yes	76M0246
96B	2.169	.3	7.66	7	1792	1648	895	150	2.8	MBMG	34	112TILL	Yes	76M0245
97	4.07	<.1	7.46	18	5824	4619	677	778	21.4	MBMG	106	211VRGL	Yes	76M1474
110	19.43	.2	7.42	9.0	3009	2390	1470	419	2.6	MBMG		211VRGL	Yes	76M1473
114	19.32	.4	7.69	12.0	1422	854	83	467	14.8	MBMG	90	211TDMC	Yes	76M1472
138	<.023	.4	9.60	14	766	423	3	372	47.5	MBMG	12	211TMDC	Yes	76M1624
139	<.023	2.9	8.82	14	1256	765	6	667	59.8	MBMG	135	211TPCK	Yes	76M1623
142	3.343	.9	8.10	11	2112	1519	813	417	3.4	MBMG	55	211CLRD	Yes	76M1620
149	<.023	.9	8.72	21	1484	914	6	838	70.2	MBMG	490	211VRGL	Yes	76M1463
150	4.62	.4	7.95	9	4186	3089	291	519	23.8	MBMG	118	211VRGL	Yes	76M1466
151	.215	1.8	7.72	10	3012	2186	502	498	10.9	MBMG	168	211VRGL	Yes	76M1458
152	.610	.4	8.25	8	5874	4405	299	1250	35.7	MBMG	115	211VRGL	Yes	76M1467
153	.520	.7		7.8			540	492		USGS	117	211VRGL	No	66M0005
154	.158	1.3					10	648		USGS	170	211VRGL	No	66M0002
155							366	379		USGS	159	211VRGL	No	54M0001
156							309	400		USGS	174	211VRGL	No	54M0002
157		.2		7.8			240	338		USGS	155	211VRGL	No	66M0007
158		.1					230	260		USGS	150	211VRGL	No	66M0003
159		.2		7.8			240	338		USGS	165		No	66M0039
160	2.395	.4					425	260		USGS		211TMDC	No	66M0023
161				7.8			230	350		USGS	225	211VRGL	No	66M0004
162	.181			8.3	1600		275	363		USGS		211VRGL	No	66M0033
163	5.29	.5			1610		85	260		USGS	120		No	66M0036
164		.5		8.3	900		332	220		USGS	150	211VRGL	No	64M0008
165	.169	<.1	7.80	1	126	73	65	64	0.1	USFS			No	76M1684
166	.361	<.1	8.19	4	214	119	116	110		USFS			No	76M1686

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
167	27N	17W	02	CBCB	04	11	77	Creek	11.3	6.7	1.5	.4	.03	< .01	5.0	85		1.5	.3
168	35N	06W	05	DD	10	23	64	Well	12	1	870*					705	12	34	1225
169	32N	05W	28	DC	10	23	65	Well	42	22	64*		.10			214	6	12	125
170	33N	06W	10	BB	03	17	37	Well			548*					600	50	116	436
171	32N	06W	01	AC				Well										24	4960
172	33N	06W	25	CB				Well	200		6641*					720		10150	33
173	34N	05W	31	CD	10	26	65	Well	40	28	370*		5.00			580		41	465
174	34N	06W	11	BA				Well	35		4269*					1685		5667	
175	36N	06W	04	DB				Well	73	30	2866*					5750		1296	
177	37N	03W	04	AD	08	04	66	Well	88	64	607*					387		19	820
178	37N	04W	12	DB	10	20	65	Well	75	43	228*					370	36	45	505
179	35N	04W	11	DD				Well	64	28	307*		2.20			442		6	545
180	34N	05W	20	BB	10	08	65	Well	90	45	191*		1.32			494		15	378

of Selected Waters (Con't.)

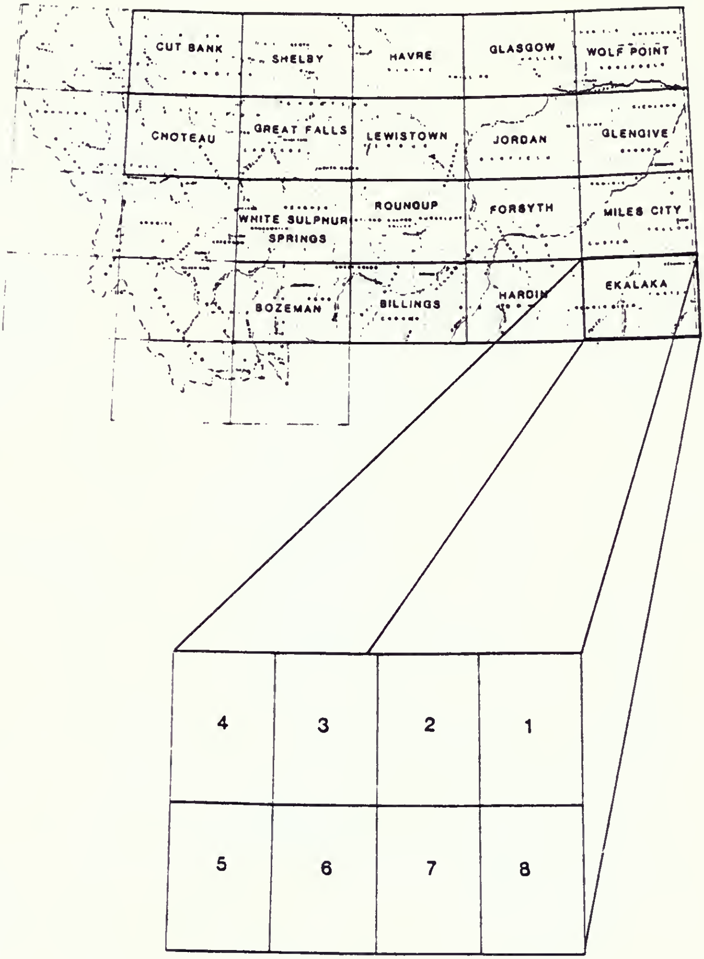
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
167	.120	<.1	7.66	2	104	59	56	53	0.1	USFS			No	76M1685
168				8.3	3000		36	598		USGS	327	211VRGL	No	64M0006
169		.4		6.1			195	186		USGS			No	65M0030
170								575		USGS		211TMDC	No	37M0001
171							400			USGS		211TMDC	No	00M0006
172							499	591		USGS		211CLRD	No	00M0008
173		1.2					215	476		USGS	164	211VRGL	No	65M0011
174							87	1380		USGS		211TMDC	No	00M0009
175							306	4710		USGS		211TMDC	No	00M0007
177	.249	.4			1780		485	317		USGS	186	211VRGL	No	65M0006
178	4.292	.8		8.9			363	364		USGS	50	211VLCC	No	65M0008
178	.181			8.9	1600		275	363		USGS		211VRGL	No	00M0010
180		.4		8.3			410	406		USGS	124	211VRGL	No	65M0012

CUT BANK 1° x 2° Sheet

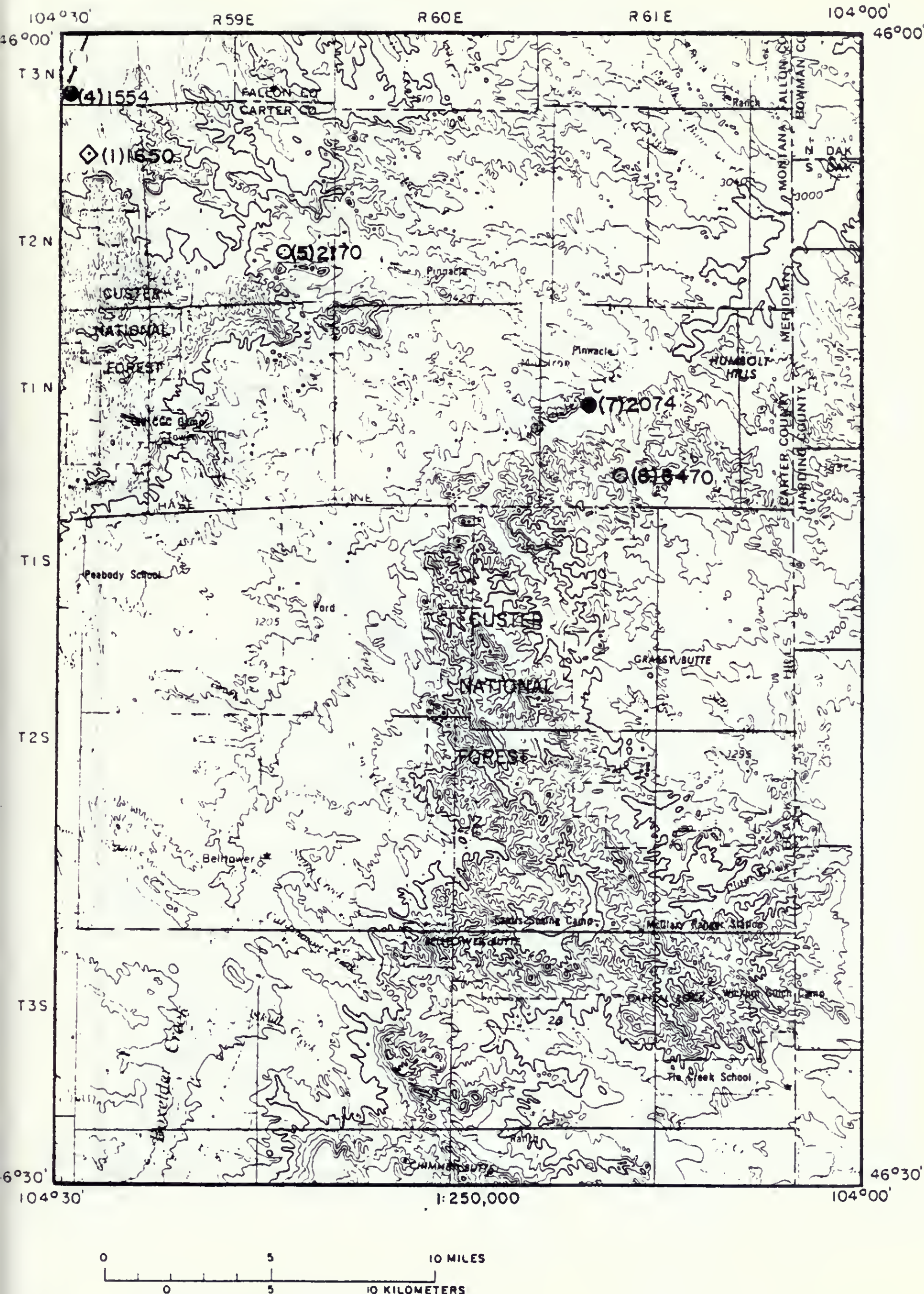
Trace Elements Analyses Sheet

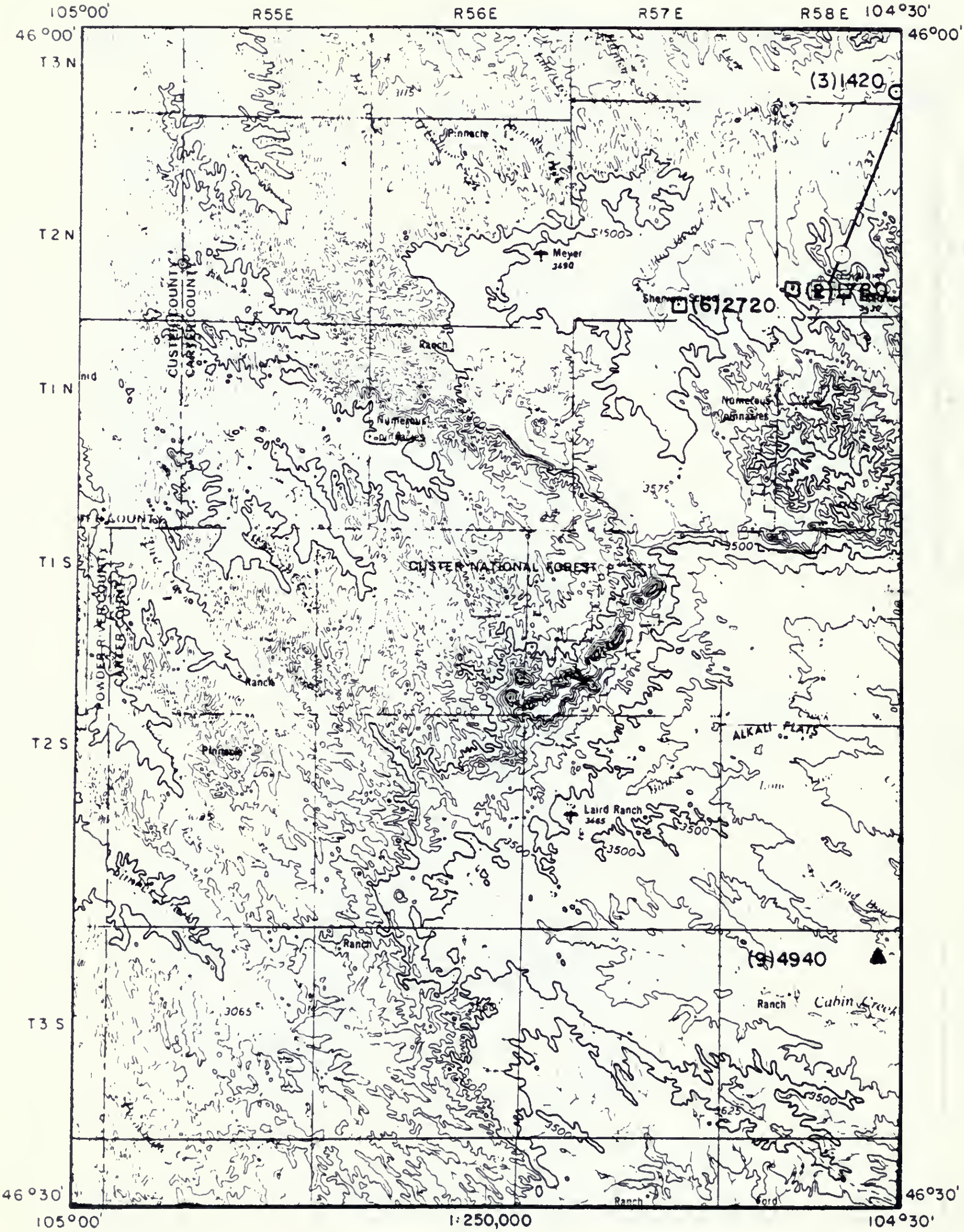
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Beryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
11	36N 05W 09 BC	.08	<.2	<2.0		.98		<.01	<.01	.05	.04	<.3	.03	.013	<2.0		4.0	.13	.70	76M1455
25	36N 05W 33 CBBC	.07	<.2	<2.0		.27		<.01	<.01	.08	.06	.42	.03	.010	<2.0		8.8	.18	.17	76M1454
33	35N 05W 05 DDDD	.08	<.2	2.4		1.3		<.01	<.01	<.05	.07	<.3	.02	.018	20.0		.65	.07	.25	76M1453
64	34N 07W 06 ABAA	<.05	<.2	<2.0	<5.0	.10	<.01	<.01	.02	<.05	.05	<.3	.02	.065	2.1		1.24	.10	.05	76M0234
81	31N 05W 34 CCC	<.05	<.2	<2.0		.43		<.01	<.01	<.05	.03	<.3	.01	.023	3.9		1.25	.13	.04	76M1471
84	30N 04W 05 CDBB	.09	<.2	<2.0		.42		<.01	<.01	.09	.07	<.3	.04	.018	26.5		3.99	.26	.04	76M1469
86	30N 04W 10 ABBB	.06	<.2	2.7		.77		<.01	<.01	<.05	.07	<.3	.01	.018	<2.0		1.20	.12	.10	76M1470
89	30N 04W 17 AAAA	.15	<.2	<2.0		3.0		<.01	.01	.06	.22	<.3	.03	.033	<2.0		3.43	.23	.01	76M1476
98A	28N 03W 17 AABB	<.06	1.53	<2.0	<6.	.8	.07	.08	.48	.67	.93	<.3	.38	.085	740		10.90	3 4	.27	76M0246
96B	28N 03W 17 ABDB	<.05	<.2	<2.0	<5.	.2	<.01	<.01	.03	.05	.12	.40	.03	.179	22.0		1.03	.25	.04	76M0245
97	29N 04W 08 CCD	<.05	.2	<2.0		1.6		<.01	.04	<.05	.31	<.3	.04	.160	3.8		7.1	.16	.05	76M1474
110	28N 05W 22 CA	.09	<.2	<2.0		.85		<.01	.01	.08	.07	<.3	.06	.018	14.9		6.7	.27	.01	76M1473
114	28N 06W 03 C	.06	<.2	<2.0		.66		<.01	.02	<.05	.02	<.3	.01	.016	5.8		.32	.09	.12	76M1472
138	27N 08W 13 CDD	.17	<.2	11.7		.25		<.01	<.01	<.05	.04	<.3	<.01	.059	<2.0		<.01	<.05	.02	76M1624
139	27N 06W 34 DCBC	<.05	<.2	<2.0		1.0		<.01	<.01	<.05	.07	<.3	<.01	.120	<2.0		.07	<.05	<.01	76M1623
142	26N 05W 12 CBBB	<.05	<.2	<2.0		.90		<.01	.02	<.05	.12	<.3	.01	.108	5.0		1.60	.71	<.17	76M1620
149	36N 06W 13 AD	.06	<.2	3.0		.87		<.01	<.01	<.05	.05	<.3	.01	.095	<2.0		.04	<.05	.03	76M1463
150	37N 04W 02 DDC	.07	<.2	<2.0		1.0		<.01	<.01	<.05	.12	<.3	.02	.033	6.6		3.14	.08	.54	76M1456
151	37N 03W 30 ACC	.08	<.2	<2.0		1.3		<.01	<.01	<.05	.09	<.3	.01	.010	<2.0		3.89	.18	2.50	76M1458
152	37N 03W 21 ACB	<.05	.2	<2.0		1.7		<.01	.01	<.05	.18	<.3	.03	.010	<2.0		3.37	.12	.45	76M1457

LOCATION BASE MAP



EKALAKA 1° x 2° SHEET


104°30'
R59E
R60E
R61E
104°00'
46°00'
T3N
(4)1554
FALLON CO
CARTER CO
(1)1650
T2N
(5)2170
CUSTER
NATIONAL
FOREST
T1N
Pinnacle
HUMBOLT HILLS
(7)2074
(8)5470
T1S
Peabody School
Ford
CUSTER
NATIONAL
FOREST
GRASSY BUTTE
T2S
Bellhower
T3S
McClary Ranger Station
Tie Creek School
CARTER COUNTY
HARDING COUNTY
MONTANA
FALLON CO
BOWMAN CO
N. DAK
S. DAK
MERIDIAN
46°30'
104°30'
104°00'
1:250,000
0
5
10 MILES
0
5
10 KILOMETERS
CONTOUR INTERVAL 100 FT



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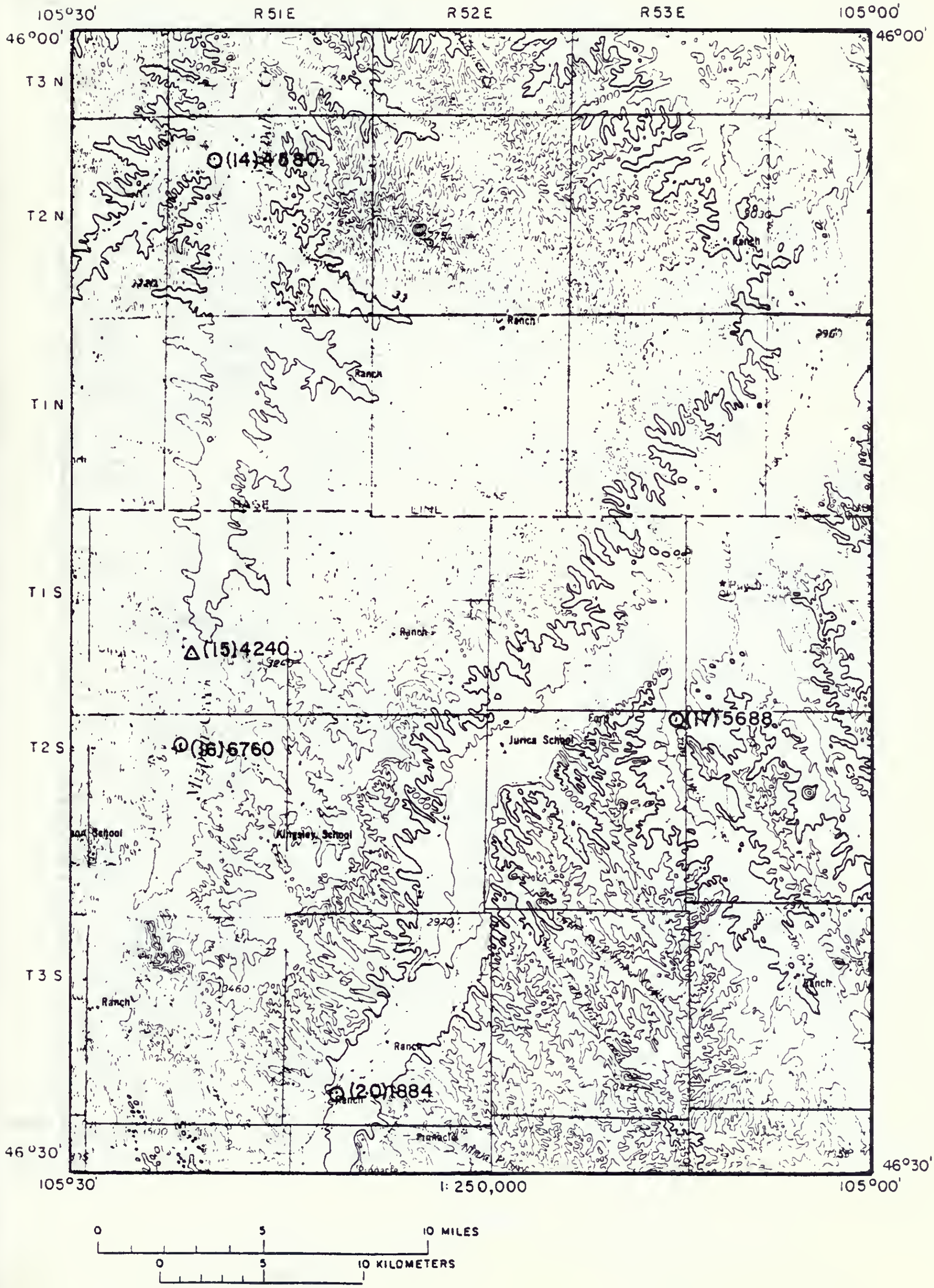
0 5 10 MILES

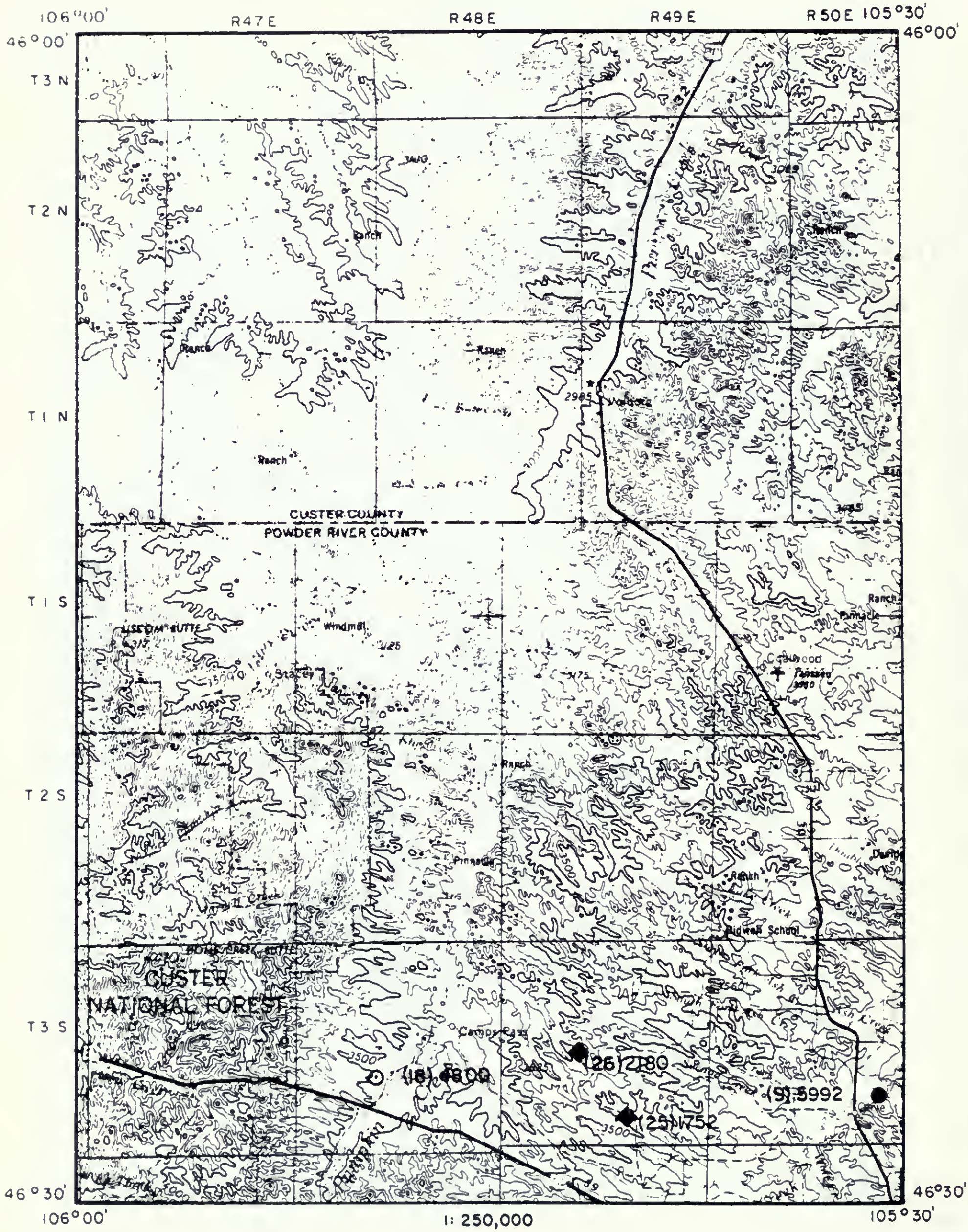
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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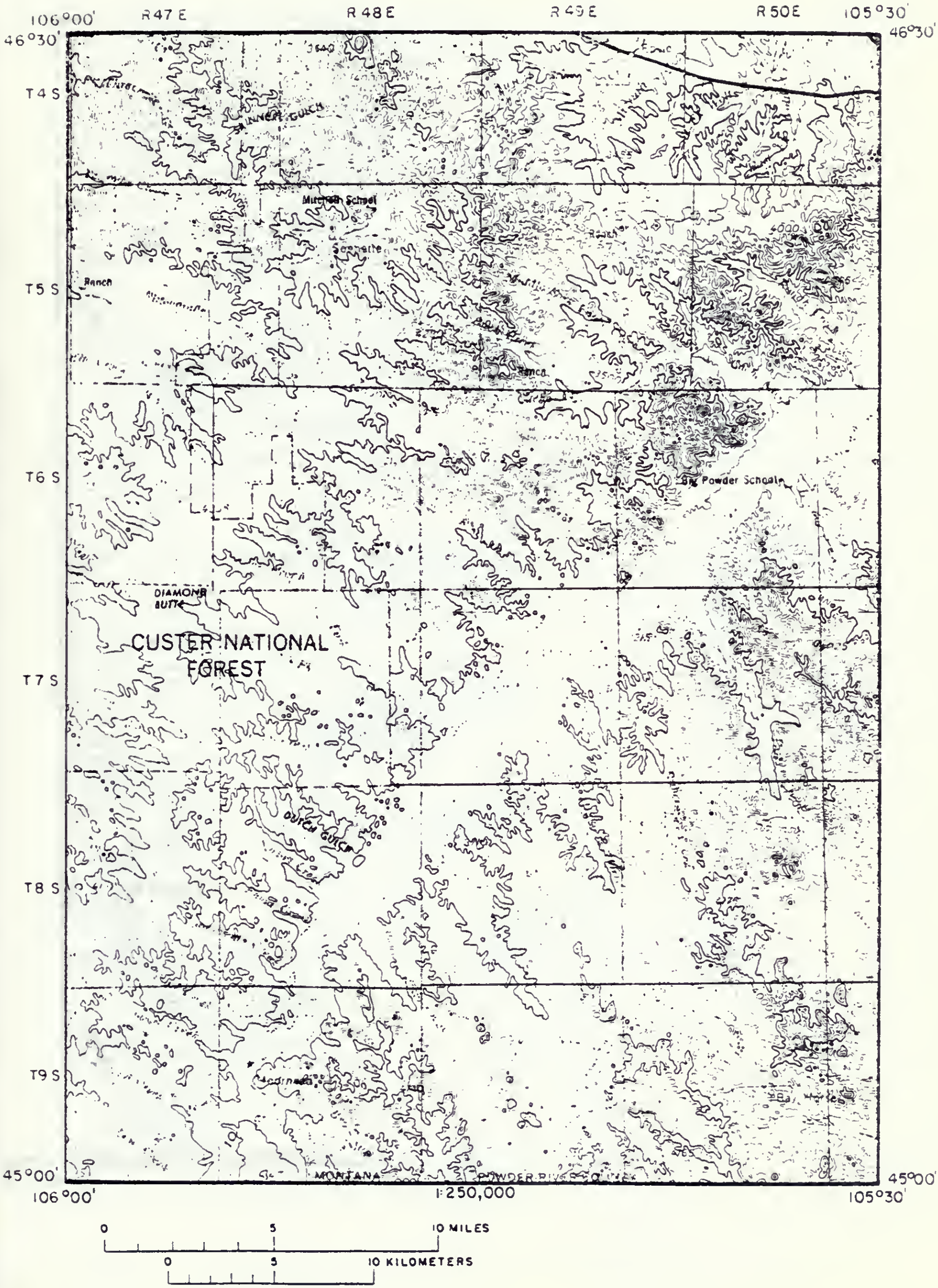
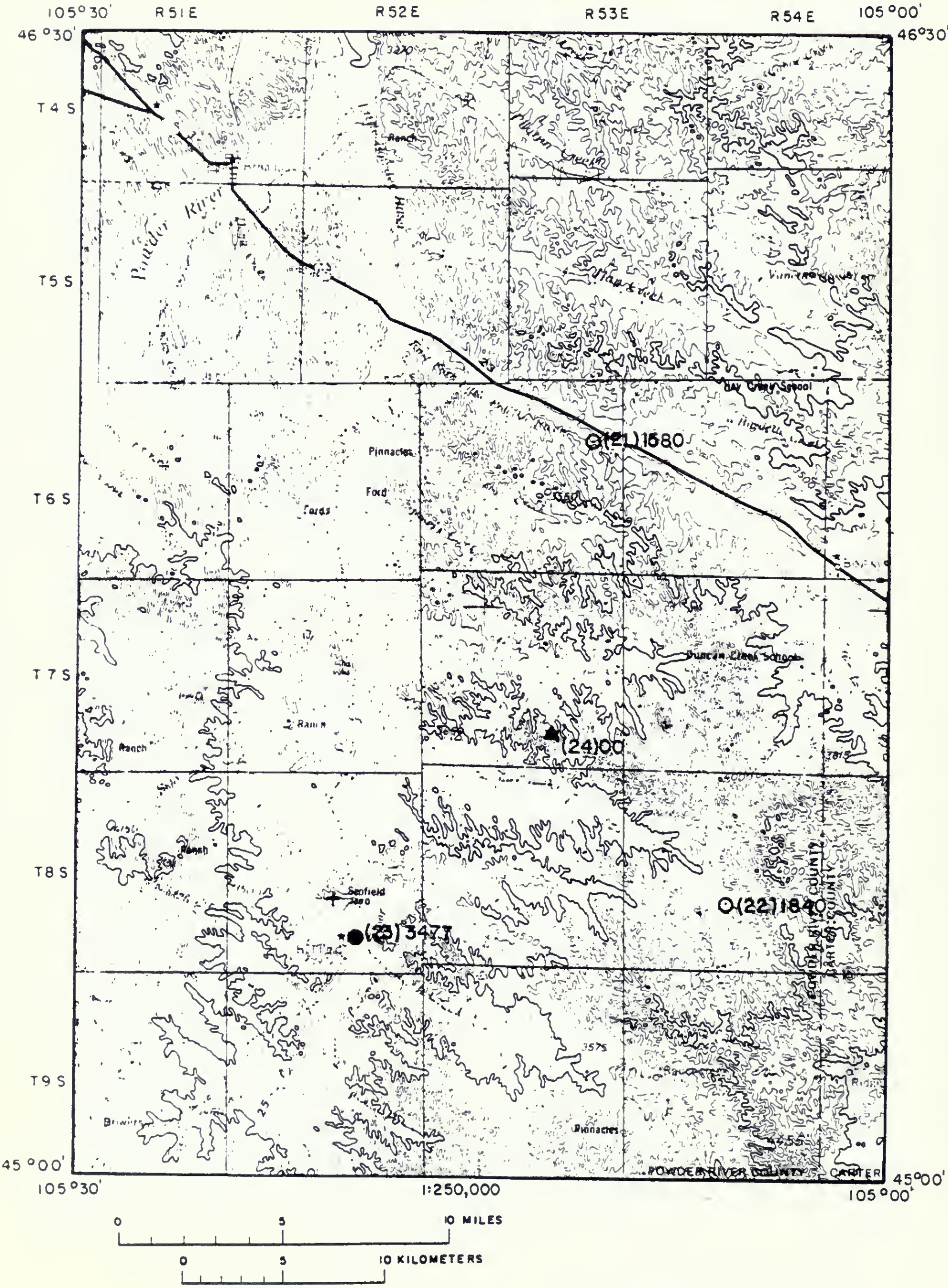
0 5 10 MILES

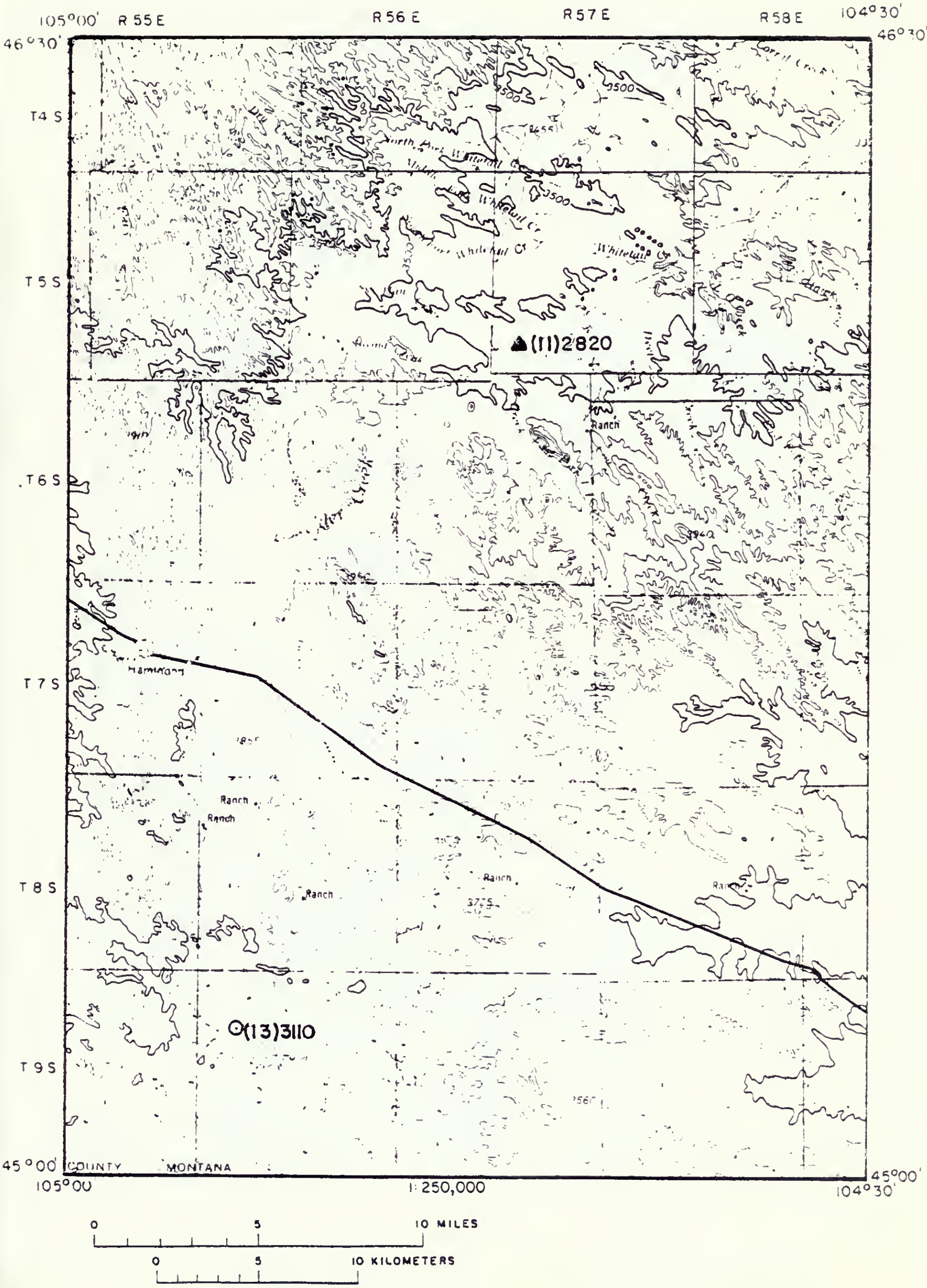
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT


106°00'
R47E
R48E
R49E
R50E
105°30'
46°30'
46°30'
T4S
T5S
T6S
T7S
T8S
T9S
SKINNER GULCH
Mitchell School
Ranch
Big Powder Schools
DIAMOND BUTTE
CUSTER NATIONAL FOREST
DUTCH GULCH
MONTANA
POWDER RIVER CO.
45°00'
45°00'
106°00'
105°30'
1:250,000
0
5
10 MILES
0
5
10 KILOMETERS



CONTOUR INTERVAL 100 FT



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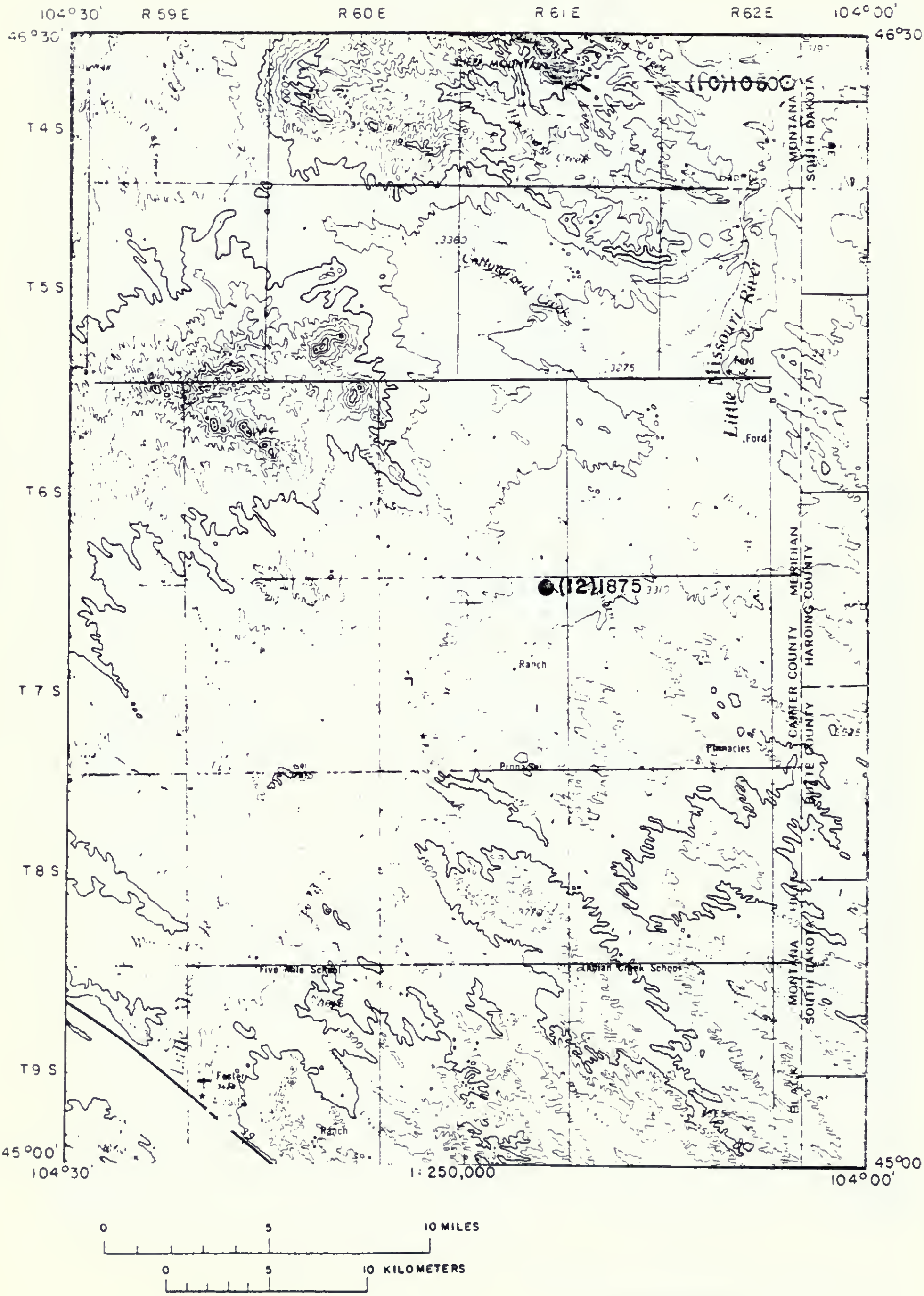


CONTOUR INTERVAL 100 FT

EKALAKA 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB2	Carter	02N 58E 11	10 10 75	Spring		Used for stock, alkali covers area below	1660		no					
2	WQB1	Carter	02N 58E 31	10 10 75	Reservoir		0.5 mile N of 5 acre seep	1780		no					
3	WQB3	Carter	03N 58E 34	10 10 75	Creek	3 cfs (E)	Little Beaver Creek	1420		no					
4	WQB5	Carter	03N 58E 34 DAB	10 15 76	Creek	3 cfs (E)	Little Beaver Creek at highway	1554		yes					
5	WQB8	Carter	02N 59E 26 CAA	10 15 76	Creek	1 cfs (E)	Coal Creek	2170		no					
6	WQB6	Carter	02N 57E 34 CCC	10 15 76	Pond	no flow	Near junked cars	2720		no					
7	WQB9	Carter	01N 61E 17 CDC	10 15 76	Creek	2 cfs (E)	Box Elder Creek at highway	2074		yes					
8	WQB10	Carter	01N 61E 33 BAA	10 15 76	Creek	2 cfs (E)	Spring Creek 0.1 mile S of farm	6470		no					
9	64M0025	Carter	03S 58E 02 DC	06 29 64	Well		21.0 miles NE of Ekalaka	4940		yes	3400			331CRLS	
10	WQB11	Carter	04S 62E 22 AAB	10 16 76	Creek	0.3 cfs (E)	Tie Creek	1060		no					
11	50M0001	Carter	06S 57E 31 AB	07 10 50	Well		36 miles E of Broadus	2820		yes	3469			337LDGP	
12	WQB12	Carter	07S 61E 01 BDB	10 16 76	River	6 cfs (E)	Little Missouri River	1876		yes					
13	WQB13	Carter	09S 56E 08 CCB	10 16 76	Creek	0.2 cfs (E)	North Fork Thompson Creek	3110		no					
14	WQB1	Custer	02N 51E 08	10 15 75	Stream	10 gpm (E)	Sand Creek	4580	4	yes					
15	WQB10	Powder River	01S 51E 27 BCB	10 19 76	Well	1 gpm (E)	Near Mizpah, pumped by windmill	4240		yes					
16	WQB9	Powder River	02S 51E 04 DDC	10 18 76	Creek	no flow	Mizpah	6760		no					
17	WQB4	Powder River	02S 53E 01 ACA	10 17 76	Creek	0.2 cfs (E)	Crow Creek	6688		yes					
18	WQB6	Powder River	03S 48E 21 CDD	10 19 78	Creek	0.2 cfs (E)	Pumpkin Creek	4800		no					
19	WQB8	Powder River	03S 50E 26 DDB	10 19 76	Creek	no flow	Mizpah Creek at highway	6892		yes					
20	WQB7	Powder River	03S 52E 32 BDA	10 19 76	River	16 cfs (E)	Powder River	1884		yes					
21	WQB3	Powder River	06S 53E 12 CCC	10 17 76	Creek	2 cfs (E)	East Fork Creek	1580		no					
22	WQB2	Powder River	08S 54E 22 CCC	10 17 76	Creek	1 cfs (E)	Belle Creek	1840		no					
23	WQB1	Powder River	08S 52E 27 DDA	10 16 76	River	3 cfs (E)	Little Powder River	3477		yes					
24	M660032	Powder River	07S 53E 26 CC	05 03 66	Well		15 miles SW of Buyes			yes	3236	128	182	125FRUN	Woodruff, Harry
25	76M1978	Powder River	03S 49E 34 ABCC	06 08 77	Spring	2 gpm (E)	Leslie Creek Spring	1752	13.7	yes	3407			125TGRV	Alderman, C
26	76M1976	Powder River	03S 49E 21 BCCB	06 08 77	Spring			2181	20.1	yes	3474			125TGRV	Aye, E.

EKALAKA

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
4	03N	58E	34	DAB	10	15	76	Creek	46.1	37.6	260	7.4				446		8.5	425
7	01N	61E	17	CDC	10	15	76	Creek	34.9	32.3	430	7.7				597	6	6.8	625
9	03S	58E	02	DC	06	29	64	Well	390	72	840*					366		220	2200
11	05S	57E	31	AB	07	10	50	Well	540	140	120*					194		35	1900
12	07S	61E	01	BDB	10	16	76	Creek	111	65	235	14				202	3	31	846
14	02N	51E	08		10	15	75	Stream	20	114	940	8.7				439	103	11	1980
16	01S	51E	27	BCB	10	19	76	Well	96	96	855	10				756		18	1795
17	02S	53E	01	ACA	10	17	76	Creek	65	102	1250	13				532	6	21	2685
18	03S	50E	26	DDB	10	19	76	Creek	422	435	685	32				529		88	3650
20	03S	52E	32	BDA	10	19	76	River	100	51	240	7.9				206	6	132	565
23	08S	52E	27	DDA	10	16	76	Creek	84	62	645	14				573		331	915
24	07S	53E	26	CC	05	03	66	Well	92	127	210*		25.4			578		8	413
25	03S	49E	34	ABCC	05	08	77	Spring	69	60	265	6.6	.54	.15	9.0	663		8	434
26	03S	49E	21	BCCB	06	08	77	Spring	113	78	325	7.7	.01	.09	12.6	715		8	682

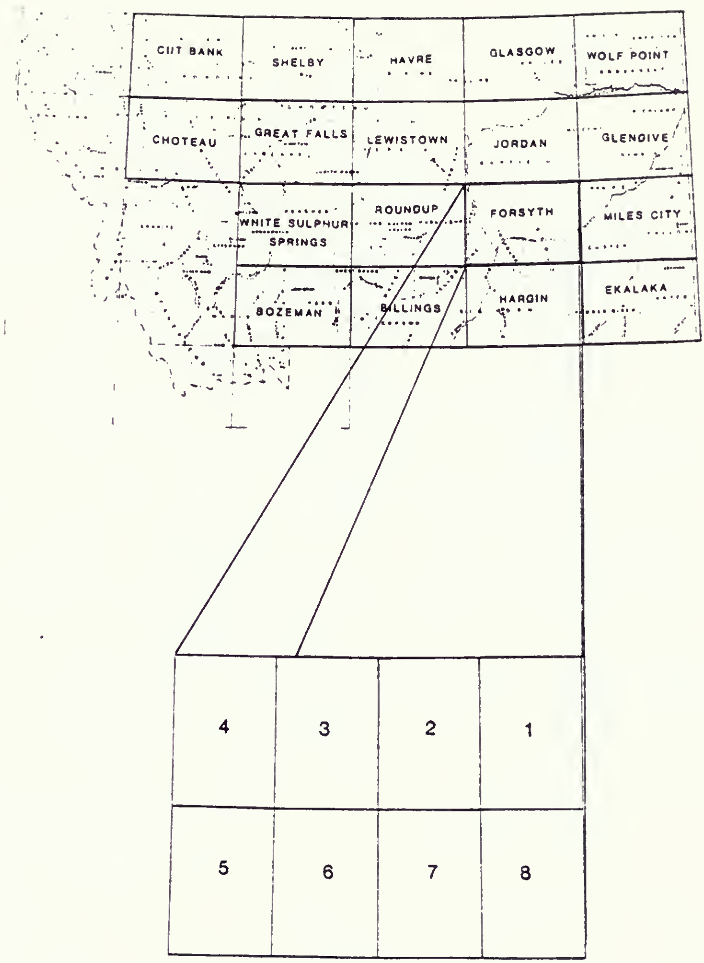
Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated
* Values reported as sodium plus potassium

1° x 2° Sheet

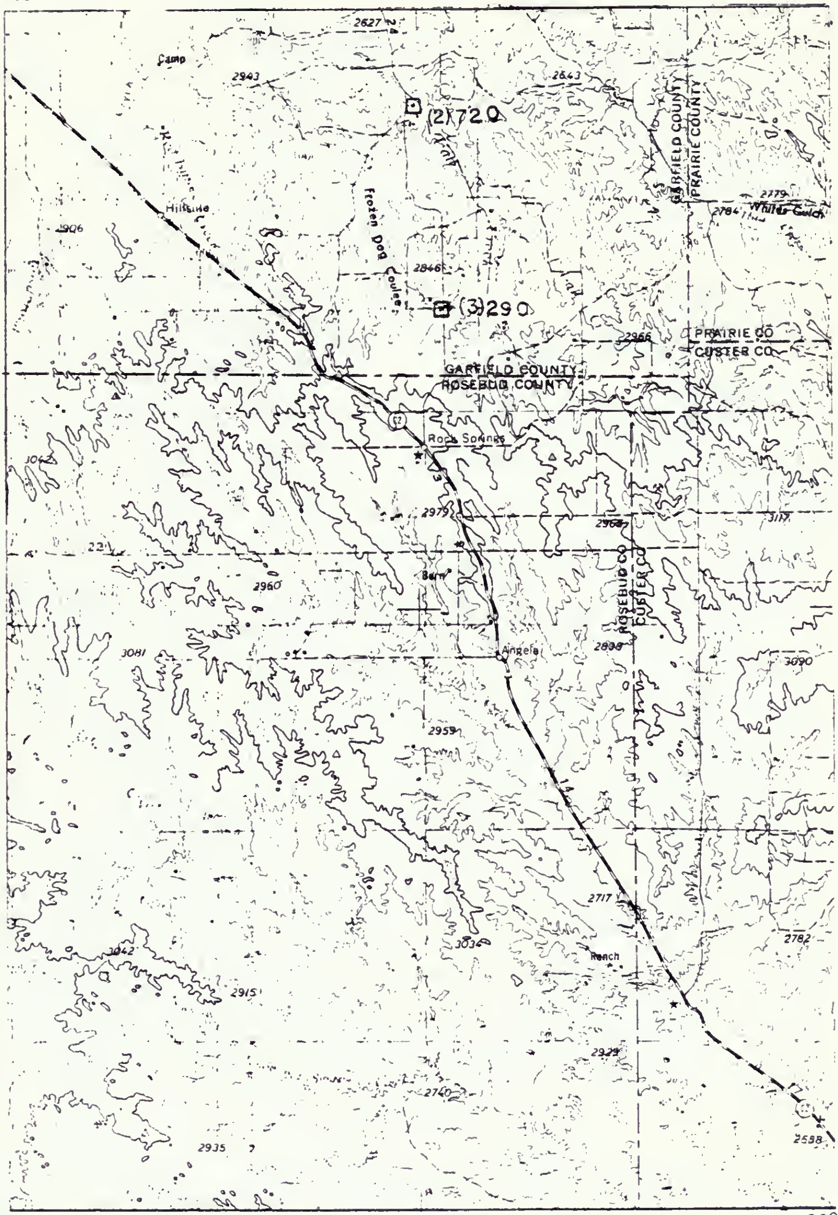
of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
4	.02		8.1		1554	1002	270	365	6.9	WQB			no	76W2587
7	.04		8.3		2074	1436	220	499	12.8	WQB			no	76W2584
9			7.9				1270	300		Unknown		331CRLS	no	64M0025
11			7.1				1920	159		Unknown		331LDGP	no	50M0001
12	.04		8.3		1875	1403	545	170	4.4	WQB			no	76W2588
14	.1		9.4		4580	3393	520	532	17.9	WQB			no	75W2100
15	.11		8.1		4240	3241	635	620	14.8	WQB			no	76W2585
17			8.3		5688	4404	580	446	22.6	WQB			no	76W2580
19	.06		8.1		5992	5573	2840	434	5.6	WQB			no	76W2583
20	.27		8.3		1884	1205	460	179	4.9	WQB			no	76W2582
23	.03		8.1		3477	2333	465	470	13	WQB			no	76W2579
24	2.1	.5					754	474		USGS		125FRUN	no	66M0032
25	.255	.2	7.08	13.7	1752	1179	419	544	5.8	USGS		125TGRV	no	76M1978
26	.441	.4	7.63	20.1	2181	1579	603	586	5.8	USGS		125TGRV	no	76M1976

LOCATION BASE MAP



FORSYTH 1° x 2° SHEET



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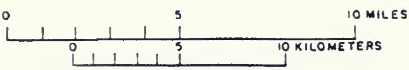

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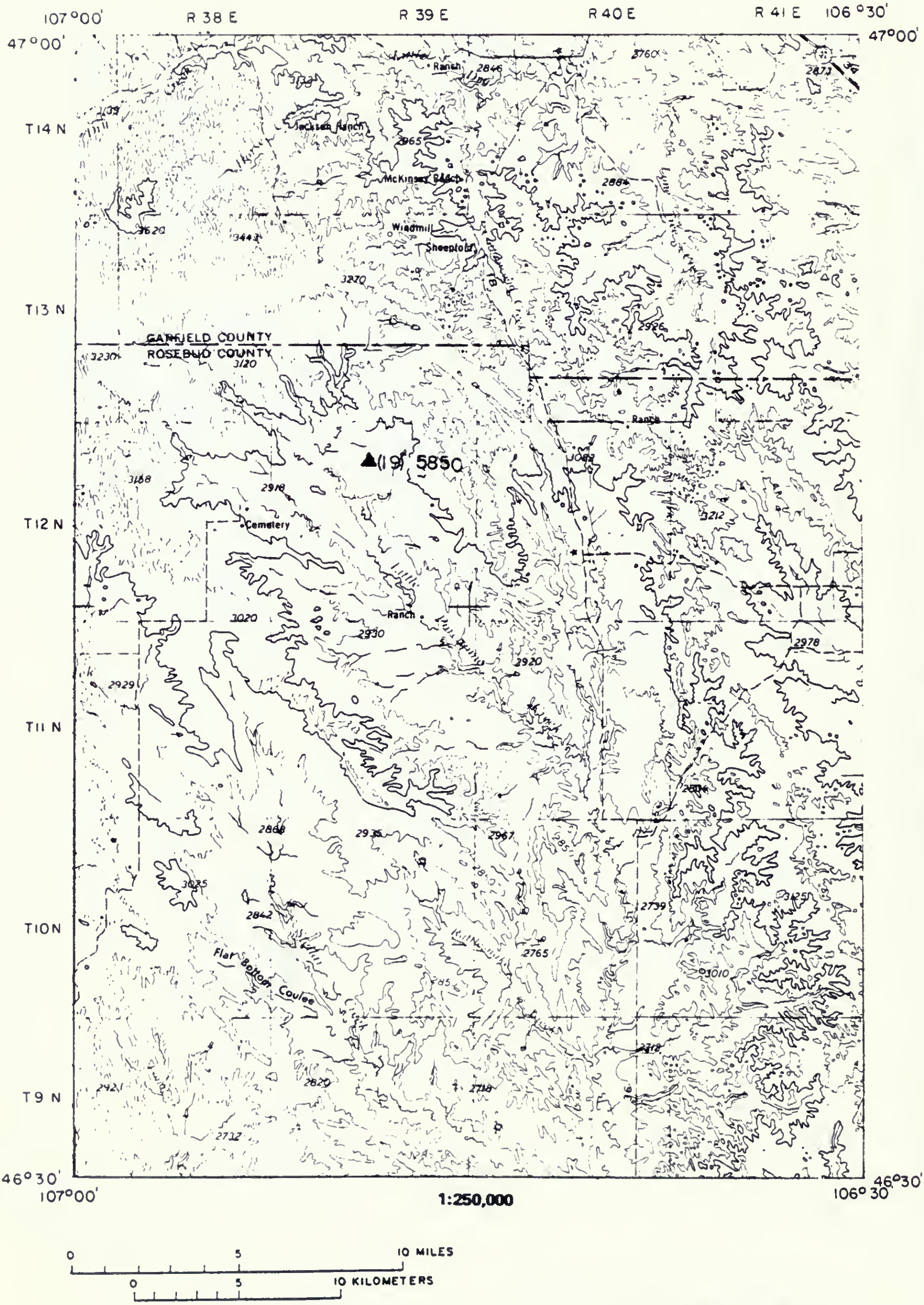

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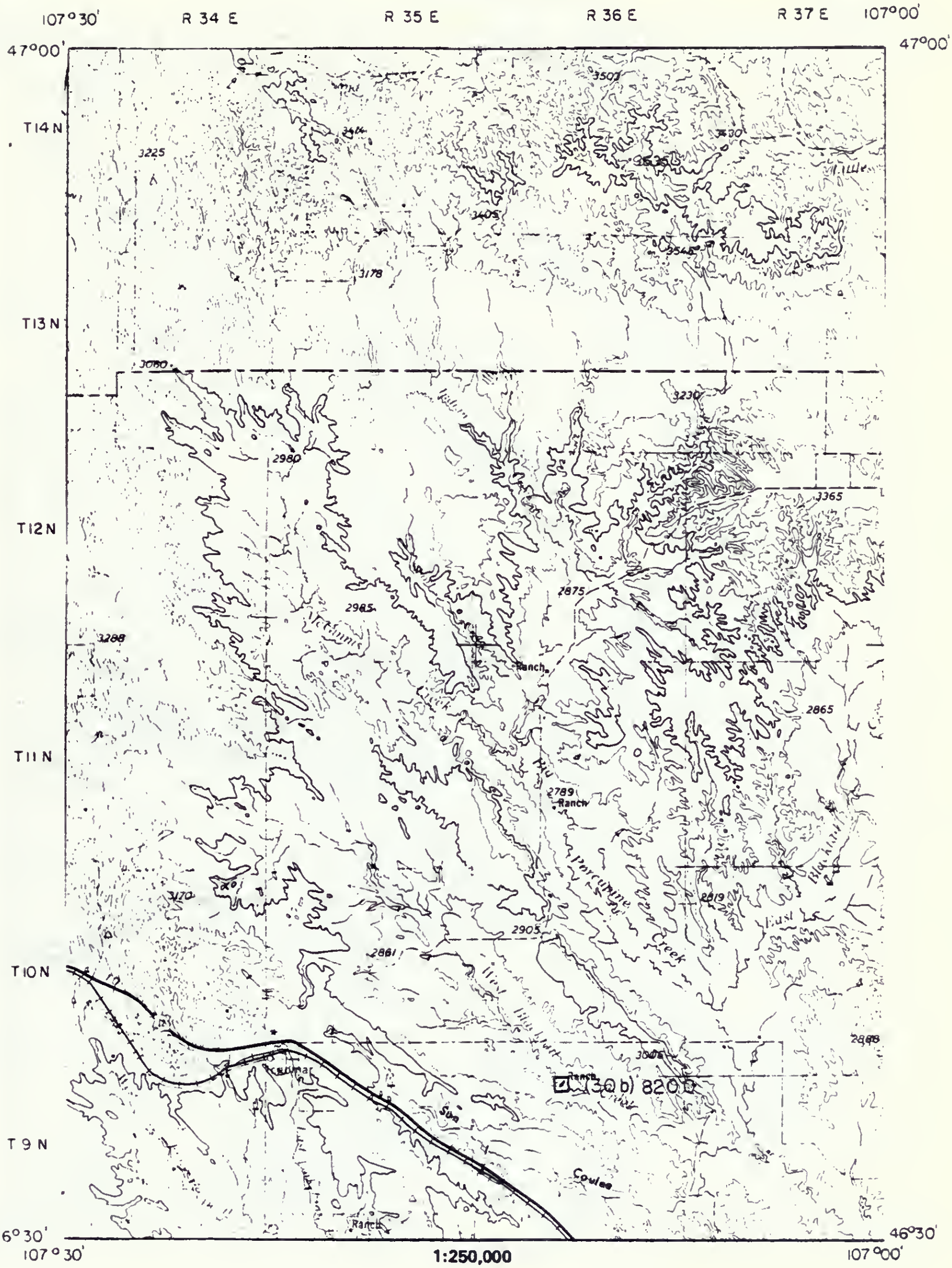

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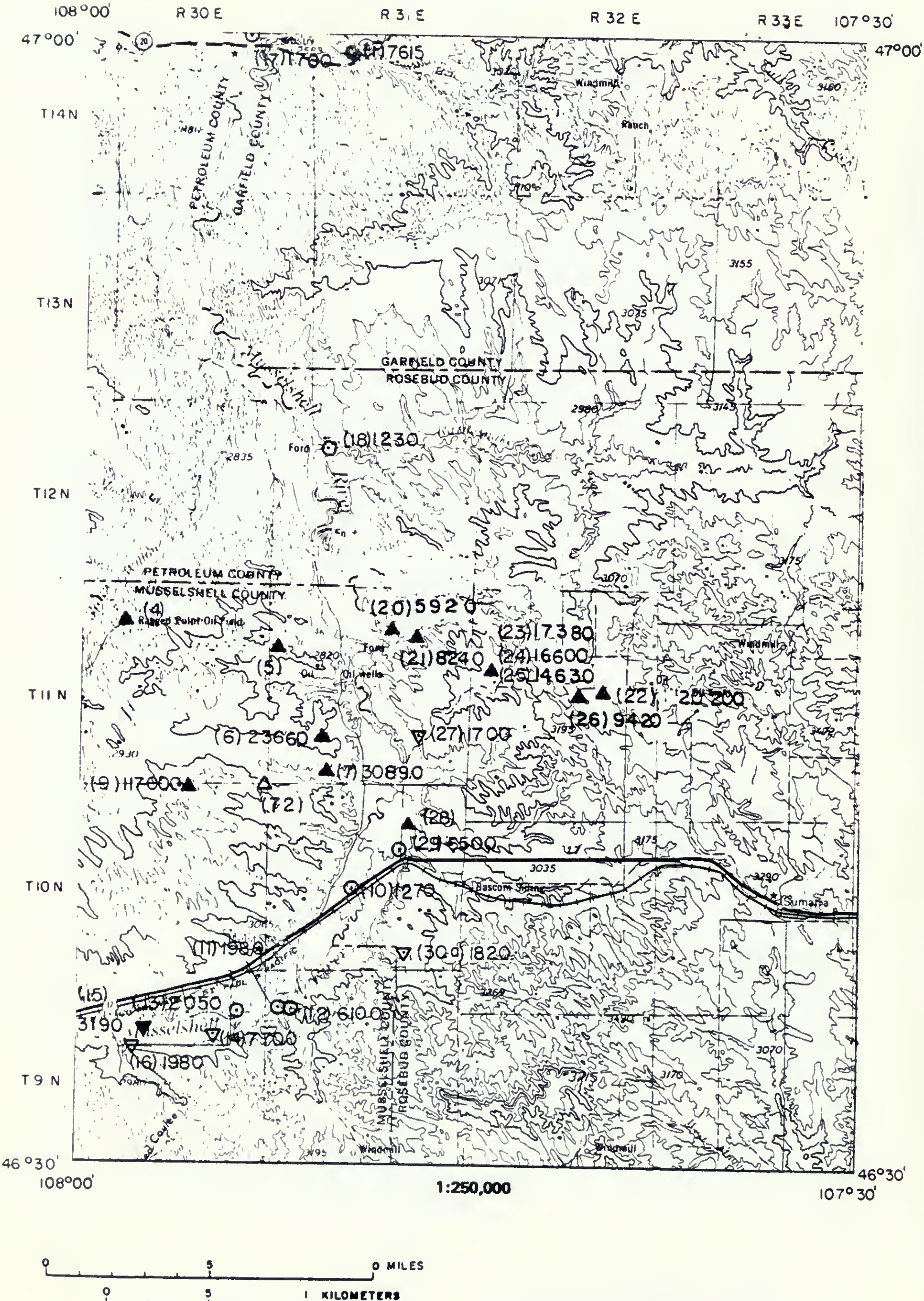
0 10 MILES

0 5 10 KILOMETERS

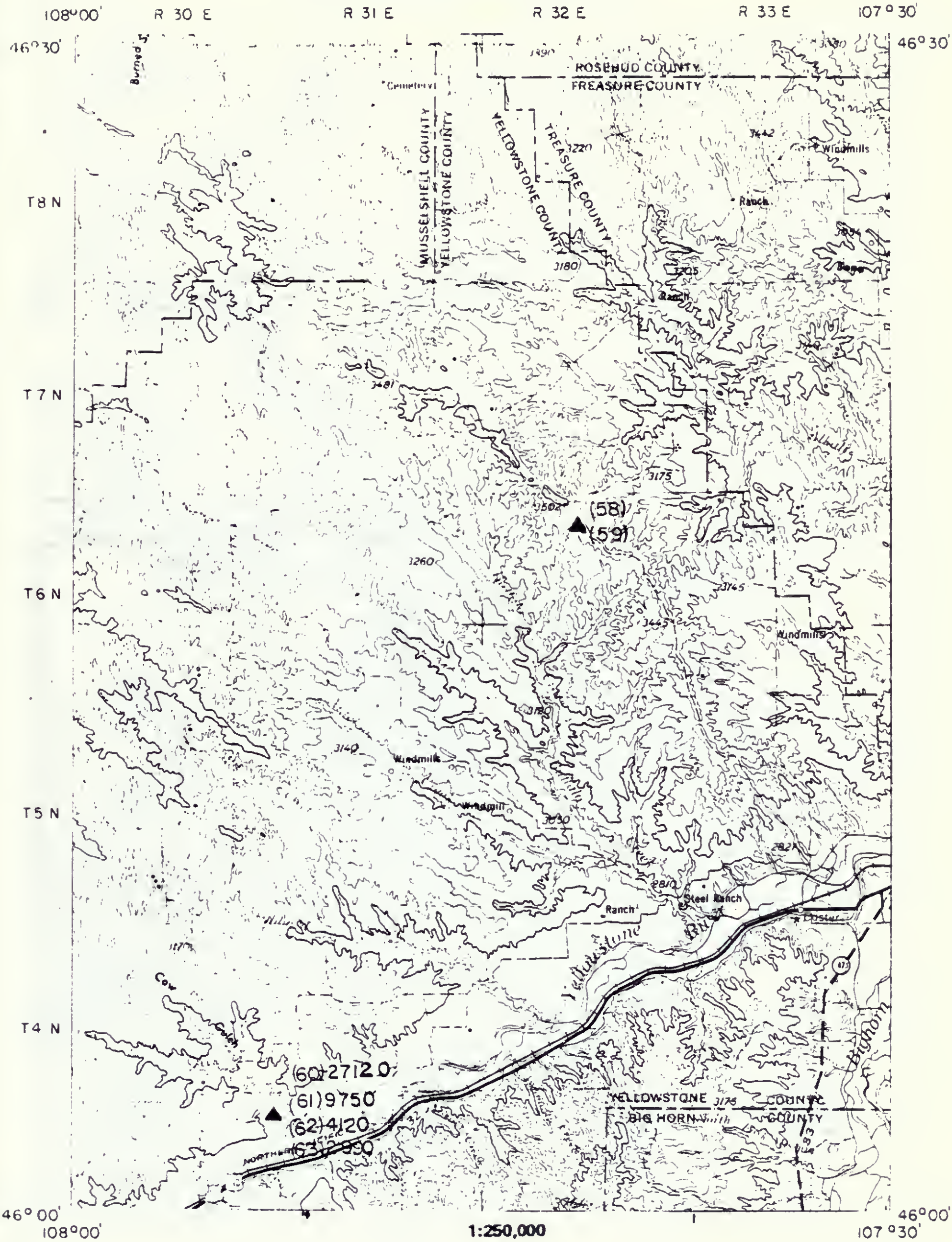
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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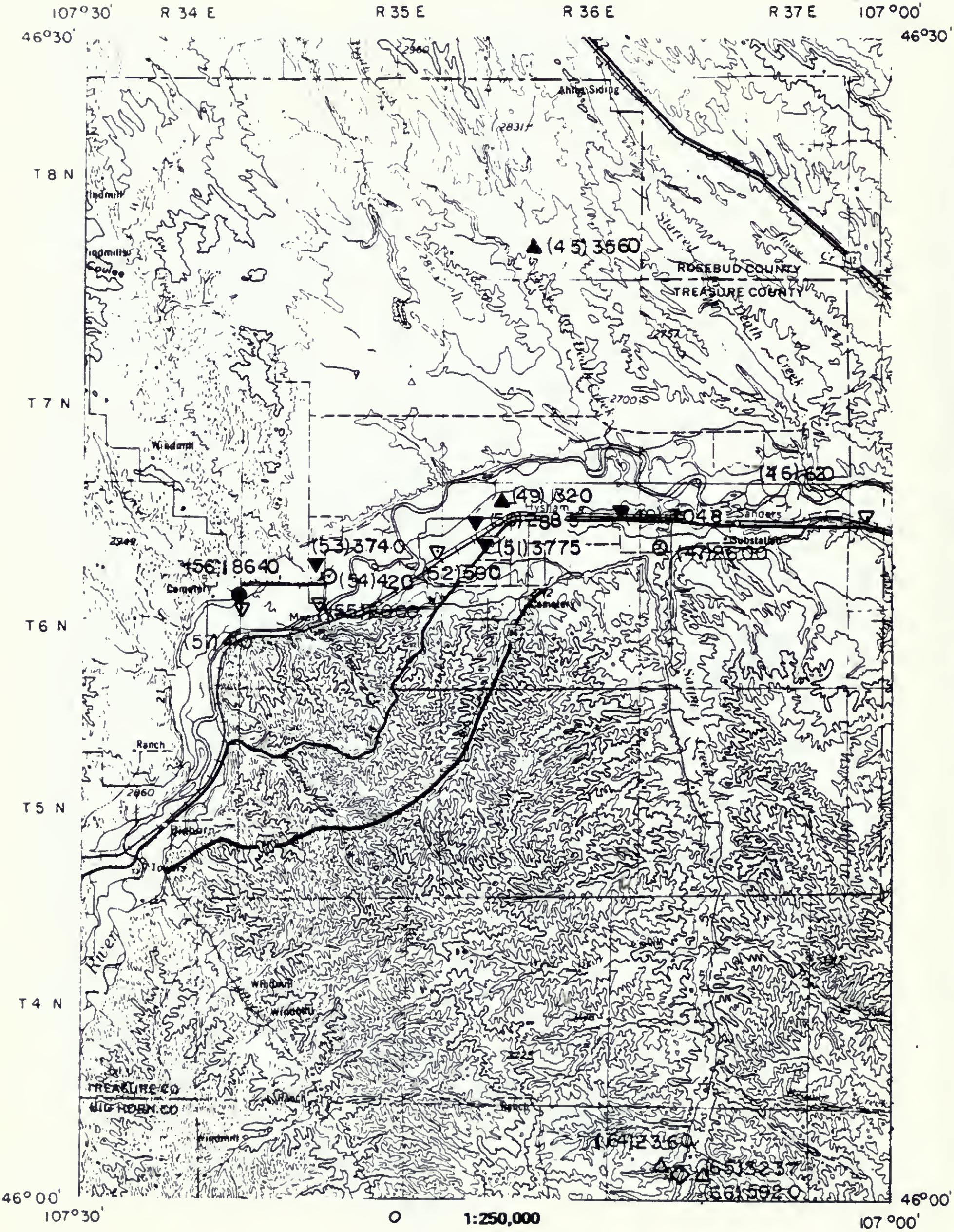
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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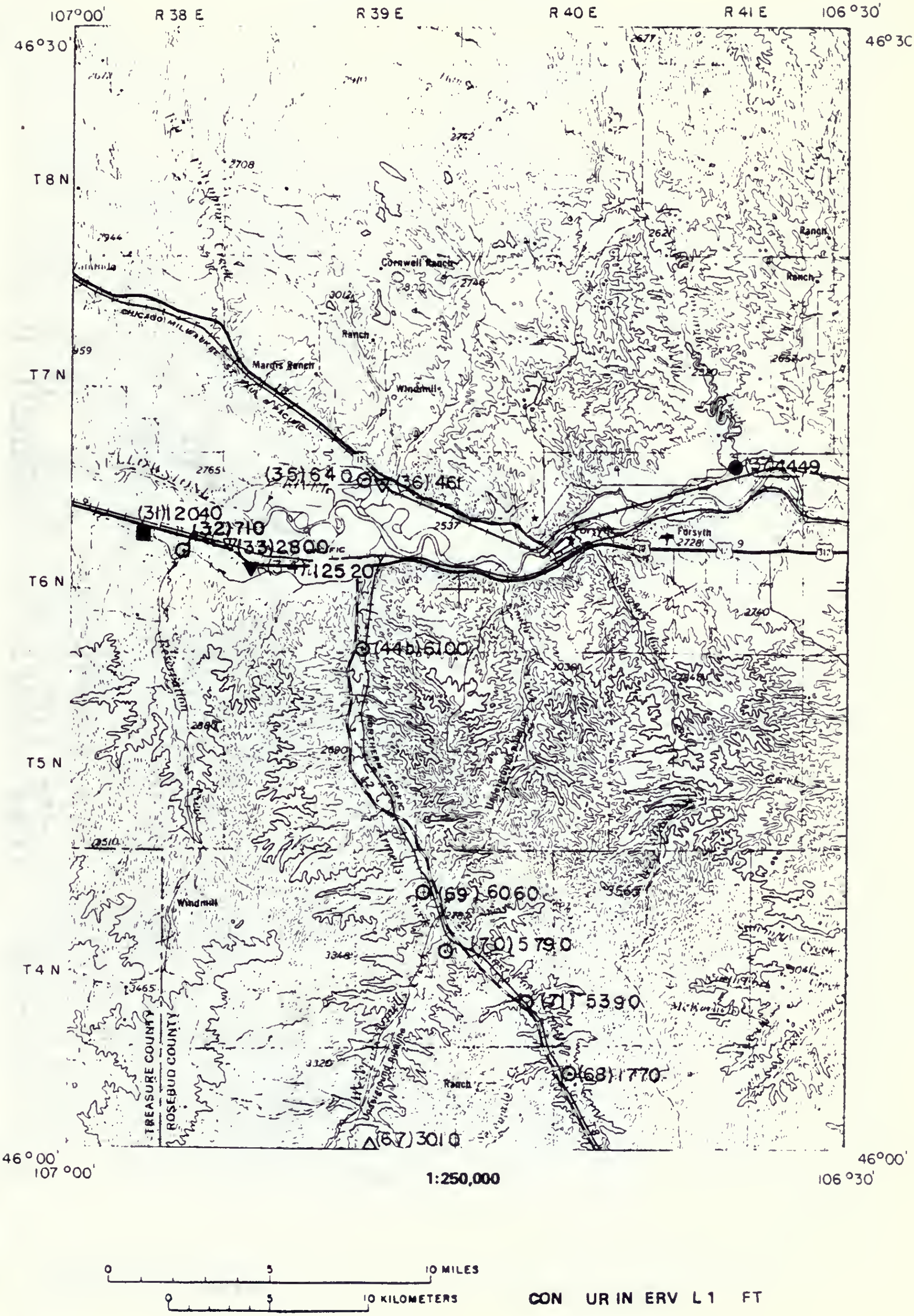
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT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R 38 E
R 39 E
R 40 E
R 41 E
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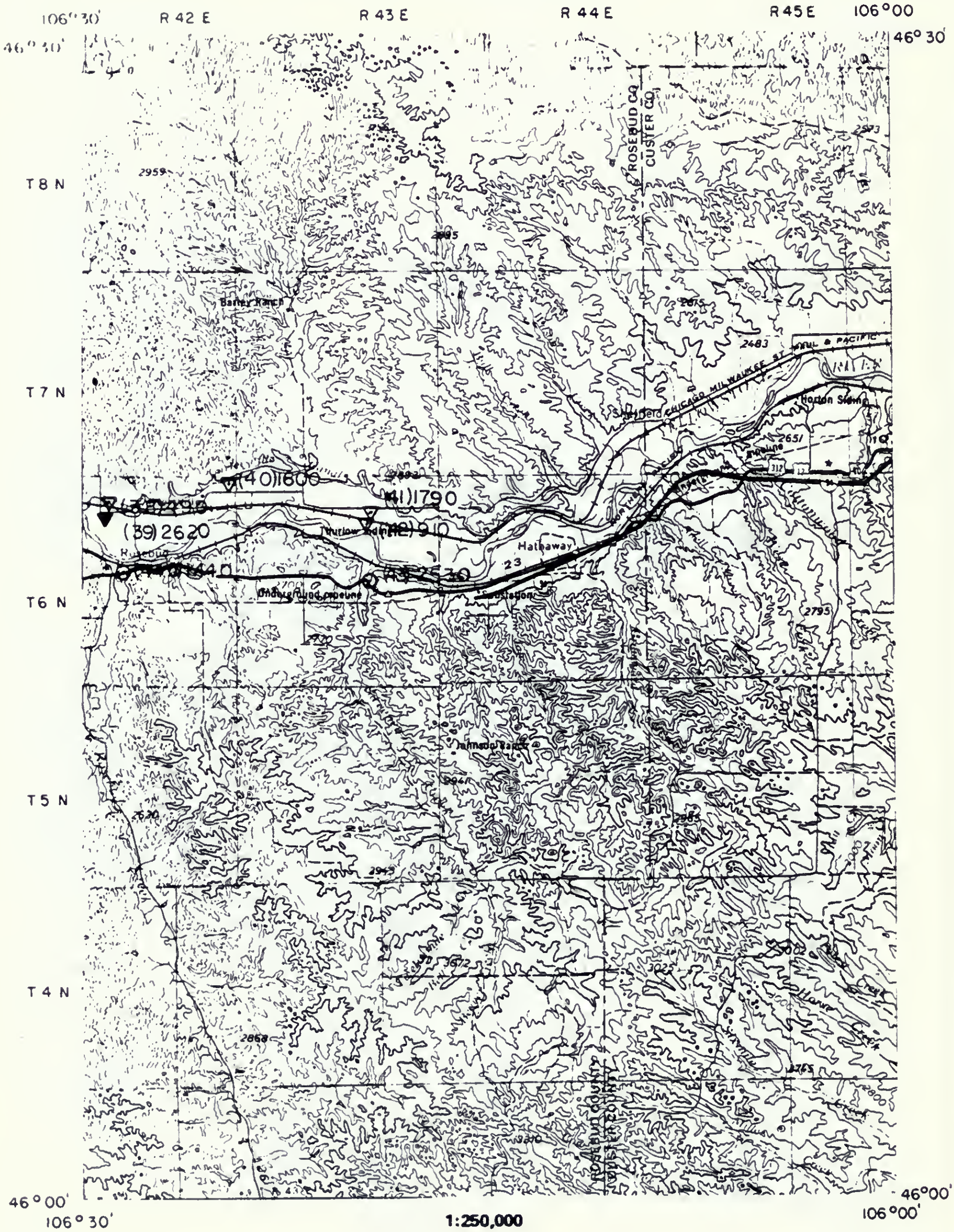
46°30'
T 8 N
T 7 N
T 6 N
T 5 N
T 4 N
46°00'
107°00'
106°30'
Cornwell Ranch
Ranch
Marcus Ranch
Windmill
CHICAGO MILWAUKEE ST PAUL AND PACIFIC
(35) 640
(36) 461
(37) 449
(31) 12040
(32) 710
(33) 2800
(34) 12520
Forsyth
(44) 6100
(69) 6060
(70) 5790
(71) 5390
(68) 1770
(67) 3010
Windmill
Ranch
TREASURE COUNTY
ROSEBUD COUNTY
1:250,000
0 5 10 MILES
0 5 10 KILOMETERS
CON UR IN ERV L 1 FT



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0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

FORSYTH 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB16	Garfield	14N 31E 07 DA	03 17 76	Creek	0.4 cfs (M)	Sage Hen Creek near Mosby	7615	7.5	yes	2590				
2	WQB13	Garfield	14N 43E 23 BC	09 02 75	Reservoir		Frozen Dog Coulee Reservoir	720		no	2640				
3	WQB12	Garfield	13N 43E 23 A	09 02 75	Reservoir			290		no	2640				
4	55M0001	Musselshell	11N 30E 08 ABA	10 25 55	Well		10 miles N of Melstone			yes	2880			331KBBY	
5	32M0004	Musselshell	11N 31E 07 CC	10 23 32	Well		Ivanhoe Dome Oil Field Gremmert Coulee			yes	3000			217LKOT	
6	56M0025	Musselshell	11N 31E 29 DB	05 02 56	Well		21 miles W of the Musselshell River	23600		yes	3030			320TYLR	
7	68M0005	Musselshell	11N 31E 32 DB	09 20 68	Well		7.9 miles NE of Melstone	30890		yes	2890			320TYLR	
8	64M0077	Musselshell	10N 31E 11 BB	09 30 64	Well		1 mile SW of Orchard Coulee			yes	2850			320TYLR	
9	54M0007	Musselshell	10N 30E 03 ABB	05 26 54	Well		8 miles NW of Melstone	117000		yes	3130				
10	WQB1	Musselshell	10N 31E 21 BD	09 08 75	River	100 cfs (E)	Musselshell River at Melstone	1270	23	yes	2950				
11	WQB18	Musselshell	09N 31E 07 BAD	10 20 76	Creek	0.5 cfs (E)	Lost Horse Creek 2 miles S of Melstone	1980		no	3060				
12	WQB17	Musselshell	09N 31E 07 ADB	10 20 76	Creek		Lost Horse Creek above Musselshell Canal	6100		no	3100				
13	WQB13	Musselshell	09N 30E 12 BBB	10 19 75	River	45 cfs (E)	Musselshell River 3 miles SW of Melstone	2050		no	3000				
14	WQB19	Musselshell	09N 30E 11 CDA	10 20 78	Ditch		Drainage along 90 acre salt area, 3.5 miles SW of Melstone	7700		no	2900				
15	WQB20	Musselshell	09N 30E 08 CAC	10 20 75	Ditch	5 cfs (E)	Drainage ditch 5 miles SW of Melstone	3190		yes	3000				Burrington, Wally
16	WQB12	Musselshell	09N 30E 17 ABC	10 19 76	Canal	2 cfs (E)	Lower Musselshell Canal 6 miles W SW of Melstone	1980		no	2980				
17	WQB20	Garfield	14N 30E 11 BBC	10 07 76	River	32 cfs (E)	Musselshell River at highway	1700		no	2580				
18	WQB13	Rosebud	12N 31E 08 CDC	10 15 76	Creek		Rattlesnake Creek	1230		no	2840				
19	61M0002	Rosebud	12N 39E 09 AA	08 23 61	Well			6850		yes	2970			337M5NC	Batts, John
20	60M005	Rosebud	11N 31E 10	09 20 60	Well		Stensvad Oil Field, Rattlesnake Coulee	5820		yes	2800			211JDRV	
21	68M0007	Rosebud	11N 31E 11	02 02 68	Well		9 miles NE of Melstone	8240		yes				331MDSN	
22	71M0551	Rosebud	11N 32E 14 BBB	11 18 71	Well		Rattlesnake Creek, water unused	20200		yes	2990				
23	68M0006	Rosebud	11N 32E 07 DA	11 25 68	Well		8 miles NE of Melstone	17380		yes	3060			320TYLR	
24	55M0002	Rosebud	11N 32E 07 DA	04 18 55	Well	21 gpm (E)	10 miles NW of Sumatra	16600		yes	2980			331HETH	
25	69M0007	Rosebud	11N 32E 07 DA	04 10 69	Well		2.2 miles W of the Musselshell River	14830		yes	2900			320TYLR	
26	69M0008	Rosebud	11N 32E 15 AB	09 04 69	Well	836 gpm (E)	9 miles NW of Sumatra	8420		yes	3040			337M5NC	
27	WQB12	Rosebud	11N 31E 26 CAC	10 15 78	Canal		W of Sumatra Oil field	1700		no	3200				
28	53M0007	Rosebud	10N 31E 11 BB	09 30 63	Well		1 mile E of the Musselshell River			yes	2840			320TYLR	
29	WQB11	Rosebud	10N 31E 14 BBB	10 15 76	Creek	0.1 cfs (E)	Home Creek near the Musselshell River	6600		no	3100				
30A	WQB14	Musselshell	10N 31E 35 BCC	10 19 76	Canal	1 cfs (E)	Upper Musselshell Canal at Melstone	1820		no					

FORSYTH 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
30B	WQB10	Rosebud	09N 36E 04 BDD	10 15 76	Pond		Stock use, 9 miles W of Ingomar by Blacktail Creek	8200		no					
31	WQB3	Rosebud	06N 38E 15 AC	10 14 76	Pond		In a 100 acre saline area caused by irrigation	12040		yes					
32	WQB4	Rosebud	06N 38E 14 DAB	10 14 76	Creek	20 cfs	Reservation Creek at highway	710		no					
33	WQB6	Rosebud	06N 39E 18 CCC	10 14 76	Ditch	0.5 cfs (E)	Drainage ditch by a pasture with a 30 acre salt area	2800		no					
34	WQB5	Rosebud	06N 39E 19 ADB	10 14 76	Ditch	0.1 cfs (E)	Drainage ditch by a pasture with a 50 acre salt area	12520		yes					
35	WQB9	Rosebud	06N 39E 02 CDC	10 15 76	Creek	1 cfs (E)	Big Porcupine Creek 5 miles W NW of Forsyth	640		no					
36	WQB8	Rosebud	06N 39E 02 DDD	10 14 76	Canal	25 cfs (E)	Hammond Canal 5 miles W NW of Forsyth	461		no					
37	WQB15	Rosebud	06N 41E 03 ADC	10 15 76	Creek	0.5 cfs (E)	Little Porcupine Creek near its mouth	4449		yes					
38	WQB2	Rosebud	06N 42E 04 CBB	09 22 76	Canal	50 cfs (E)	Cartersville Canal 2.5 miles NW of Rosebud	490		no					
39	WQB1	Rosebud	06N 42E 09 BBB	09 22 76	Ditch		Drainage ditch 2 miles NW of Rosebud	2620	18.5	yes					
40	WQB16	Rosebud	06N 42E 01 ACA	10 18 76	Ditch	0.5 cfs (E)	Drainage ditch in pasture with a 20 acre salt area	1600		no					
41	WQB18	Rosebud	06N 43E 03 DDD	10 16 76	Ditch		Drainage ditch near a 10 acre salt area	1790		no					
42	WQB17	Rosebud	06N 43E 10 AA	10 16 76	Ditch		Drainage ditch near a 10 acre salt area	910		no					
43	WQB19	Rosebud	06N 43E 15 ODC	10 18 76	Creek	0.1 cfs	Sweeny Creek at I-94	2530		no					
44A	WQB14	Rosebud	06N 42E 18 DBC	10 15 76	Creek	7 cfs (E)	Rosebud Creek at highway bridge	1440		no					
44B	WQB7	Rosebud	06N 39E 35 CAC	10 14 76	Creek	0.1 cfs (E)	Armells Creek 2 miles S of I-94	6100		no					
45	57M0005	Treasure	08N 36E 33 AA	08 25 57	Well	80 gpm (E)	0.75 miles NE of Froze-To-Death Creek	3560		yes	2720			320AMSD	
46	WQB12	Treasure	06N 38E 06 CDD	10 14 76	Canal	60 cfs (E)	Irrigation canal 10 miles E of Hysham	620		no					
47	WQB11	Treasure	06N 37E 07 CDD	10 14 76	Creek	1 cfs (E)	Sarpy Creek 1 mile S of highway	2600		no					
48	WQB10	Treasure	06N 36E 01 CCC	10 14 76	Canal	2 cfs (E)	Irrigation canal 2.5 miles E of Hysham	3048		yes					
49	WQB5	Treasure	06N 36E 05 D	04 29 75	Well		Stock well near grain elevators	1320		yes					Zent, Howard
50	WQB1	Treasure	06N 36E 07 AD	09 22 76	Canal		Irrigation ditch, muddy water	2885		yes					
51	WQB9	Treasure	06N 36E 08 CAC	10 14 76	Ditch		Drainage ditch 0.8 mile W of Hysham	3775		yes					
52	WQB2	Treasure	06N 35E 13 AA	09 22 76	Canal		Irrigation canal adjacent to sugar beet field	590		no					
53	WQB8	Treasure	06N 35E 18 BDO	10 14 76	Ditch	1 cfs (E)	Drainage ditch 0.2 mile N or bridge	3740		yes					
64	WQB3	Treasure	06N 35E 18 CC	09 22 76	Creek	20 cfs (E)	Muggins Creek at road	420		no					
55	WQB6	Treasure	06N 35E 21 CAA	10 14 76	Ditch	1 cfs (E)	Drainage ditch 0.2 mile N of highway bridge	2600		no					
56	WQB4	Treasure	06N 34E 24 DA	09 22 76	Creek		Alkali Creek	18640		yes					
67	WQB7	Treasure	06N 34E 24 DAA	10 14 76	Ditch	1 cfs (E)	Irrigation ditch at cattle guard	410		no					
68	44M0002	Yellowstone	06N 32E 02 CC	10 27 44	Well		23 miles S of Sumatra			yes	3380			331CRLS	

FORSYTH 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
59	44M0003	Yellowstone	06N 32E 02 CC	11 04 44	Well		23 miles S of Sumatra			yes	3380			331MDSN	
60	56M0001	Yellowstone	03N 31E 04 CBB	10 24 56	Well		1.3 miles NW of Pompeys Pillar	27120		yes	3010			217LKOT	
61	56M0002	Yellowstone	03N 31E 04 CBB	10 56	Well		1.3 miles NW of Pompeys Pillar	9750		yes	3010				
62	56M0006	Yellowstone	03N 31E 04 CBB	11 05 56	Well		19 miles NW of Custer	4120		yes	3010			320TSLP	
63	56M0007	Yellowstone	03N 31E 04 CBB	11 08 56	Well		19 miles NW of Custer	2990		yes	3010			320AMSD	
64	73M604	Treasure	03N 37E 08 DB	06 25 73	Well		Domestic use	2360	10.6	yes	3100				Howard, Rick
65	74M106	Treasure	03N 37E 09 ACCB	06 25 73	Spring		Stock use	3237	23	yes	3000			125TGRV	Howard
66	74M108	Treasure	03N 37E 09 DDDD	06 73	Well		Stock use	5920	10.5	yes	3060			126TGRV	Howard
87	74M0040	Rosebud	03N 40E 19 BD	09 12 73	Well	20 gpm (M)	Stock use, I mile SE of Gillin Ranch	3010		yes	3160	30			
68	73M584	Rosebud	03N 41E 06 CDCA	07 24 73	Creek		Armells Creek	1770	27	yes	2920				
69	73M585	Rosebud	04N 40E 09 BBCA	07 25 73	Creek		Armells Creek	6060	21	yes	2740				
70	73M586	Rosebud	04N 40E 21 AABA	07 25 73	Creek		Armells Creek	6780	22	yes	2920				
71	73M587	Rosebud	04N 40E 25 CBDB	07 26 73	Creek		Armells Creek	5390	24	yes	2850				
72	64M0019	Musselshell	10N 30E 01 AA	04 27 64	Well		0.76 miles NE of Butts Coulee			yes	3050			320TYLR	

FORSYTH

Chemical Analyses

Map ref no.	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
1	14N 31E 07 DA	03	17	76	Creek	291	344	1300	12.6				325		47	4440
4	11N 30E 08 ABA	10	25	55	Well	300	55	3000*					370		2500	5400
5	11N 31E 07 CC	10	23	32	Well			550*					885	24	51	340
6	11N 31E 29 DB	05	07	66	Well	280	34	6400	30				1730		3300	8500
7	11N 31E 32 DB	09	20	68	Well	76	50	7500	75				732	60	7200	5800
8	10N 31E 11 BB	09	30	64	Well	16	76	460*					511	75	520	60
9	10N 30E 03 ABB	05	26	54	Well	2800	640	32000*					278		57400	2200
10	10N 31E 21 BD	09	09	75	River	82	54	120	3.7	.95	.10		282		11	435
15	09N 30E 09 CAC	10	20	78	Ditch	94	150	500	10				573		34	1430
19	12N 39E 09 AA	08	23	61	Well	500	75	890*					415		640	2200
20	11N 31E 10	09	20	60	Well	26	10	1700*					85	50	440	2500
21	11N 31E 11	02	02	68	Well	320	40	1500*					366		1700	1500
22	11N 32E 14 BBB	11	18	71	Well	423	1145	4120	45.3	.14	17.76	10.6	2		2826	10200
23	11N 32E 07 DA	11	25	68	Well	190	27	4500	31				988	48	2600	5600
24	11N 32E 07 DA	04	18	55	Well	280	46	4800*					760		260	10000
25	11N 32E 07 DA	04	10	69	Well	290	27	3500	46				854		2300	4400
26	11N 32E 15 AB	09	04	69	Well	340	46	1800*					476		2100	1600
28	10N 31E 11 BB	09	30	63	Well	16	76	460*					511	76	520	60
31	06N 38E 15 AC	10	14	76	Pond	414	575	2410	37				1220		9.7	7330
34	06N 39E 19 ADB	10	14	76	Ditch	368	355	2890	23				472		3.2	6040
37	06N 41E 03 ADC	10	15	76	Creek	401	136	500	52				188	6	302	2030
39	06N 42E 09 BBB	09	22	76	Ditch	102	30.6	490	7.5				445		19	980
45	08N 36E 33 AA	06	25	57	Well	260	53	390*					380		94	1200
48	06N 36E 10 CC	10	14	76	Canal	116	89	470	10				317		32	1250
49	06N 36E 05 D	04	29	75	Well	102	34.5	156					285		26.3	440
50	06N 36E 07 AD	09	22	76	Canal	95	49	490	9.5				410		28	925
51	06N 36E 08 CAC	10	14	76	Ditch	107	120	545	13				335		45	1430
53	06N 35E 16 BDD	10	14	76	Ditch	94	67	755	11				671		38	1490
56	06N 34E 24 DA	09	22	76	Creek	98	43	5200	19	.41	.06		922		205	11450
58	06N 32E 02 CC	10	27	44	Well	270	41	590*					275		140	1800
59	06N 32E 02 CC	11	04	44	Well	580	68	1400*					355		280	3900
60	03N 31E 04 CBB	10	24	56	Well	140	50	6100*					535		9400	57
61	03N 31E 04 CBB	10		56	Well	46	11	2400*					930	118	2300	1100
62	03N 31E 04 CBB	11	05	56	Well	370	77	620*					315		120	2100
63	03N 31E 04 CBB	11	08	56	Well	400	90	310*					340		66	1600
64	03N 37E 08 DB	06	25	73	Well	32	33	517	6.2			9.4	525	5	22	836
65	03N 37E 09 ACCB	06	25	73	Spring	56	238	420	6.9	.02		9.9	490	2	36	1516
66	03N 37E 09 DDDD	06		73	Well	20	40	1485	7.3			7.6	716	72	11.8	2632
67	03N 40E 19 BD	09	12	73	Well	15.7	4.9	747.5	3.9	.14	.02	10.3	681		11.6	1040
68	03N 41E 08 CDCA	07	24	73	Creek	23	44	361	3.5	.24	.14	1.1	425	26	8	594
69	04N 40E 09 BBCA	07	25	73	Creek	92	214	1310	11.4	.05	.03	1.7	425	24	33	3405
70	04N 40E 21 AABA	07	25	73	Creek	120	203	1245	8.6	.09	.18	8.6	492		33	3270
71	04N 40E 26 CBDB	07	25	73	Creek	216	264	935	10.5	.11	.03	4.3	371		38	3165
72	10N 30N 01 AA	04	27	64	Well	29		3800*					738	96	3400	2800

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

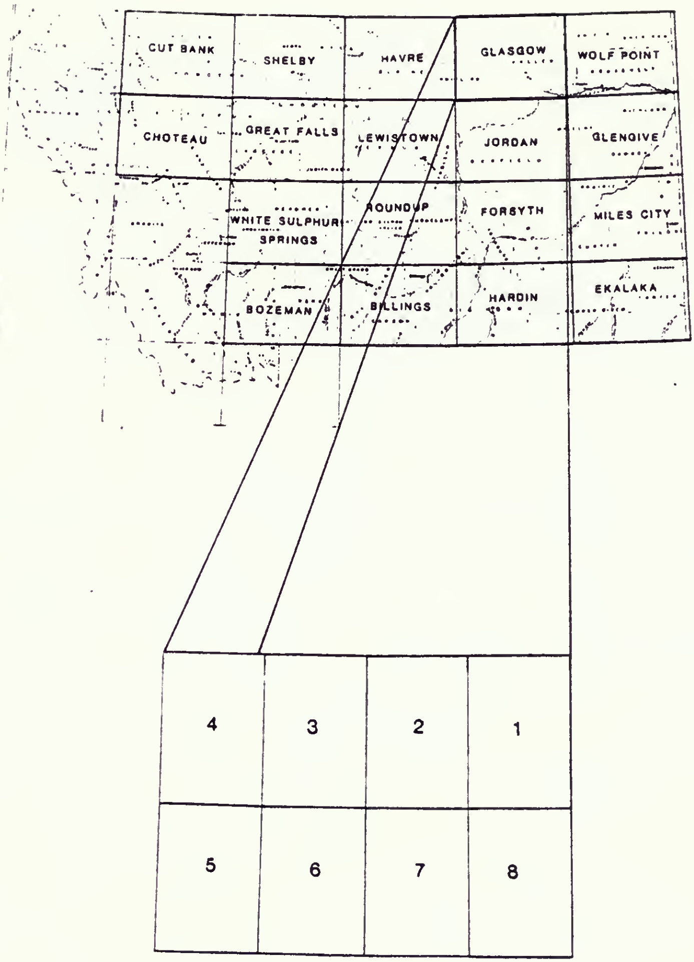
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
1	.24		7.86	7.5	7615	6759	2140	267	12.2	WQB			No	76W0493
4							975	303		Unknown		331KBBY	No	55M0001
5								766		Unknown		217LKOT	No	32M0004
6			8.2			19400	839	1420	96.1	Unknown		320TYLR	No	66M0026
7			8.6			21120	396	700	164	Unknown		320TYLR	No	68M0005
8			8.0				353	544		USGS		320TYLR	No	64M0077
9			5.4				9230	228		Unknown			No	54M0007
10	.08		8.25	23	1270	987	426	231	2.5	WQB			Yes	75W1898
15	.07		8.2		3190	2500	855	470	7.4	WQB			No	76W2598
19			6.8				1580	340	5.7	Unknown		337MSNC	No	61M0002
20			8.3				106	153	7.4	Unknown		211JDRV	No	60M0005
21			7.8				964	300	5.1	Unknown		331MDSN	No	68M0007
22		1.9	5.3		20200	18790	5850	1	23.6	MOG			No	71M0551
23			8.2			13480	588	890	80.9	Unknown		320TYLR	No	68M0006
24			7.2				888	623		Unknown		331HETH	No	55M0002
25			7.6			10980	835	700	52.7	Unknown		320TYLR	No	69M0007
26							1040	390	12.8	Unknown		337MSNC	No	69M0008
28			8.0				353	544		Unknown		320TYLR	No	63M0007
31			7.6		12040	11380	3400	1000	18.0	WQB			No	76W2590
34	.8		8.2		12520	11910	2380	387	25.8	WQB			No	76W2591
37	.03		8.4		4449	3520	1560	168	5.5	WQB			No	76W2596
39	.28		7.9	18.5	2620	1850	380	365	10.6	WQB			No	76W2344
46			6.9				887	312	6.3	Unknown		320AMSD	No	57M0005
48	50		8.2		3048	2170	655	260	8.0	WQB			No	76W2595
49	.11		7.61		1320	1043	397	234	3.4	WQB			No	75W0597
50	40		8.1		2885	1840	440	336	10.2	WQB			No	76W2341
51	98		8.2		3775	2530	761	275	8.6	WQB			No	76W2594
53	.98		8.1		3740	2790	510	550	14.5	WQB			No	76W2593
56	.10		8.2		18640	17470	422	756	110	WQB			Yes	76W2343
58							843	226		Unknown		331CRLS	No	44M0002
59							1730	291		Unknown		331MDSN	No	44M0003
60			7.8				555	439		Unknown		217LKOT	No	56M0001
61			8.3				160	960		Unknown			No	56M0002
62			7.1				1240	258		Unknown		320TSLP	No	56M0006
63			7.2				1370	279		Unknown		320AMSD	No	56M0007
64	.271	1.4	8.36	10.5	2360	1722	217	448	15.3	MBMG			No	73M604
65	1.8	.2	8.42	23	3237	2777	1140	410	5.5	MBMG		125TGRV	No	74M106
66	.1	.7	8.65	10.6	5920	4629	215	828	44.3	MBMG		125TGRV	No	74M106
67	.791	.8	8.2		3010	2171	59	559	42.1	SCS			No	74M0040
68	.877	.5	8.78	27	1770	1272	242	437	10.2	USGS			Yes	73M584
69	.519	.4	8.56	21	6060	5302	1120	429	17.1	MBMG			Yes	73M585
70		.3	8.26	22	5790	5131	1150	403	18.1	MBMG			Yes	73M586
71		.3	8.06	24	5390	4816	1640	305	10.1	MBMG			Yes	73M587
72			8.5				72	764		Unknown		320TYLR	No	64M0019

FORSYTH 1° x 2° Sheet

Trace Elements Analyses Sheet

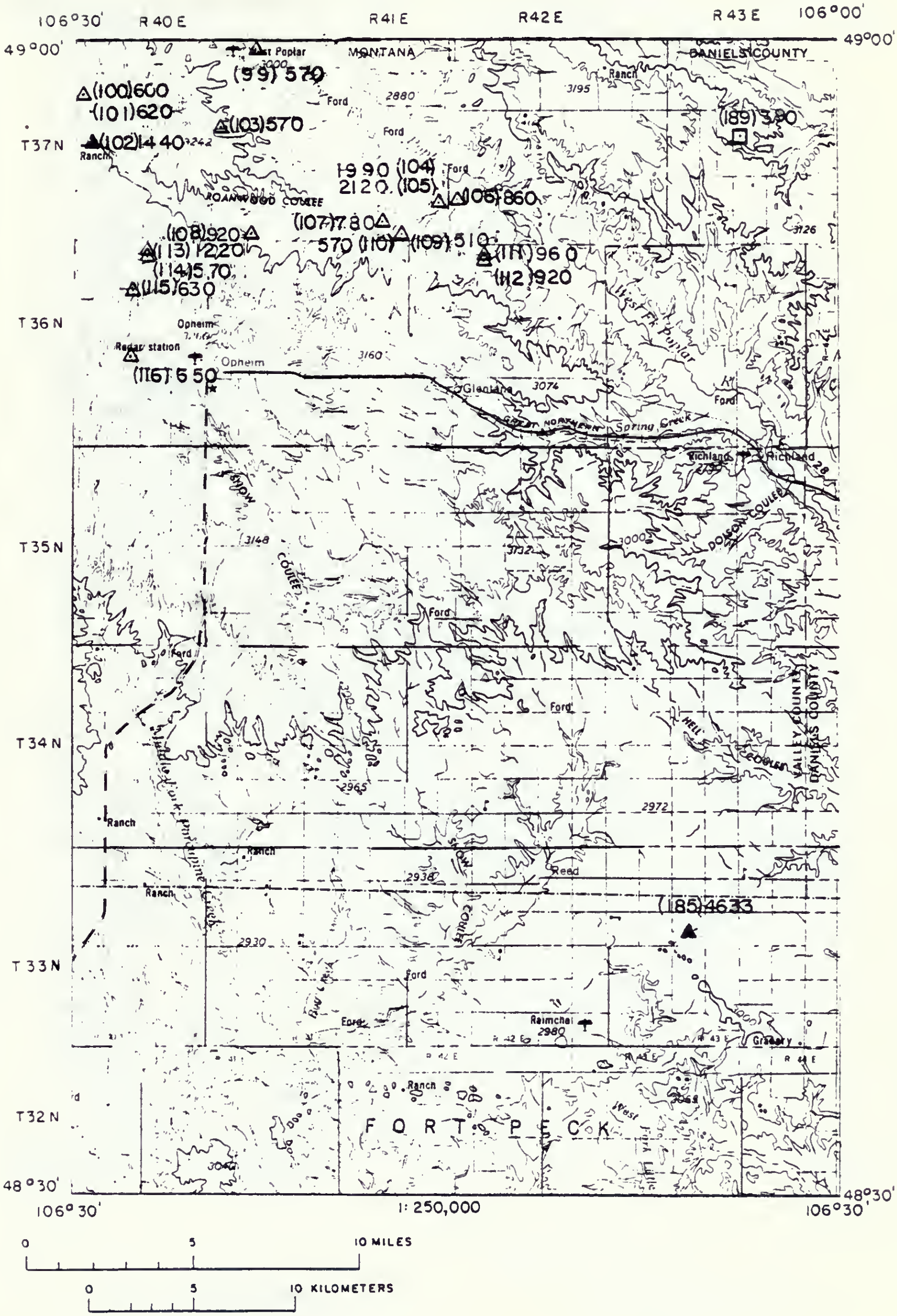
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (μg/l)	Beryllium (μg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (μg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (μg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
10	10N 31E 21 BD	.51		2			.002		<0.01	<0.05	<1.0	.4	.02		<1.0	<0.05	.52		.01	75W1898
58	06N 34E 24 DA			<1.0			<0.005		<0.01	<0.05			.12			.04	4.9		<0.01	76W2343
68	03N 41E 06 CDCA					.2	<0.01	<0.02	<0.01	.1		.2	<0.05	.21					.1	73M584
69	04N 40E 09 BBCA					.5	.01	<0.02	<0.01	.1		.2	<0.05	.04					.02	73M585
70	04N 40E 21 AABA					.6	.02	<0.02	.01	.1		.2	<0.05	.03					.02	73M586
71	04N 40E 25 CBDB					.8	.01	.02	.01	.1		2	<0.05	.03					.02	73M587

LOCATION BASE MAP



GLASGOW 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY



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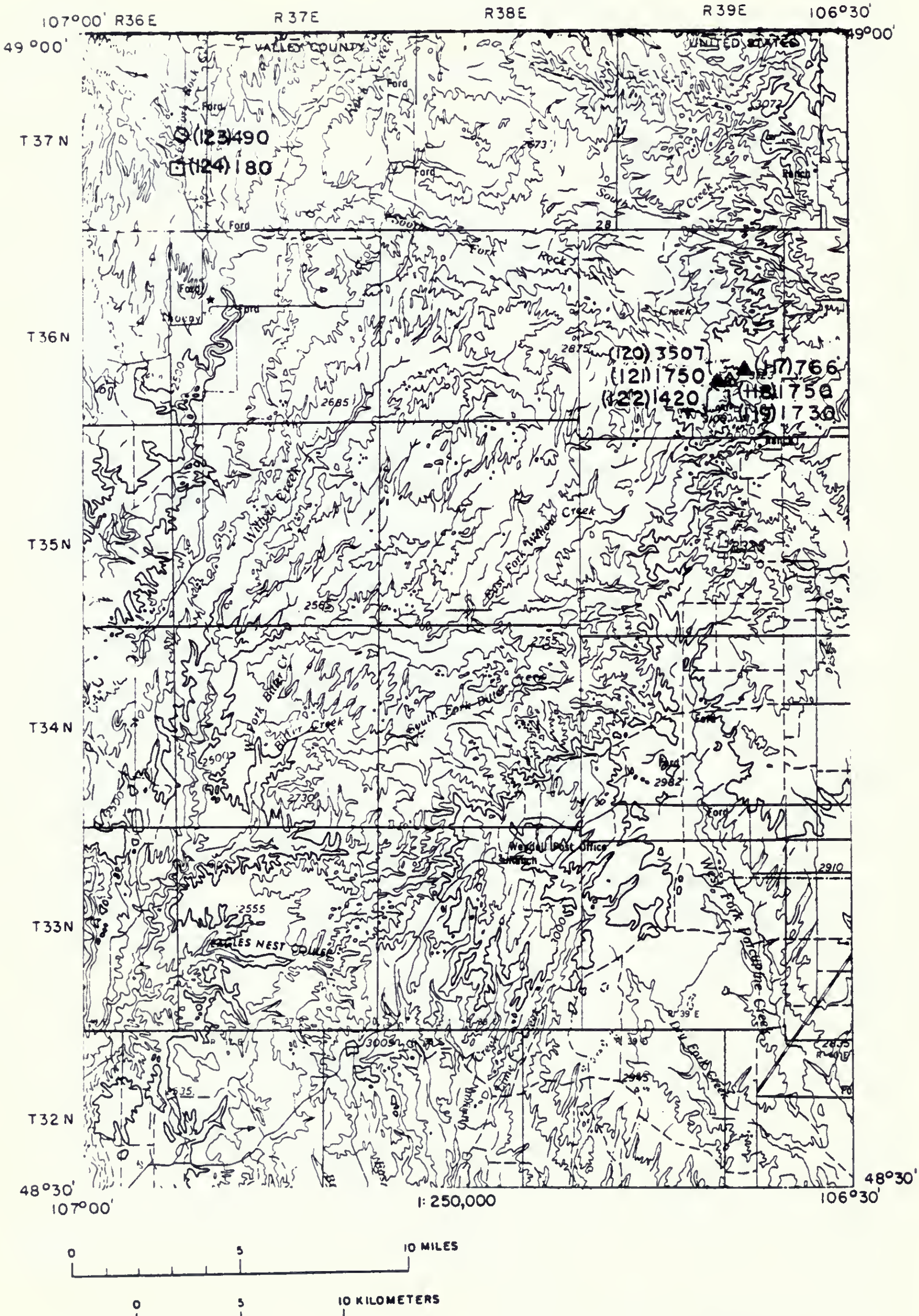
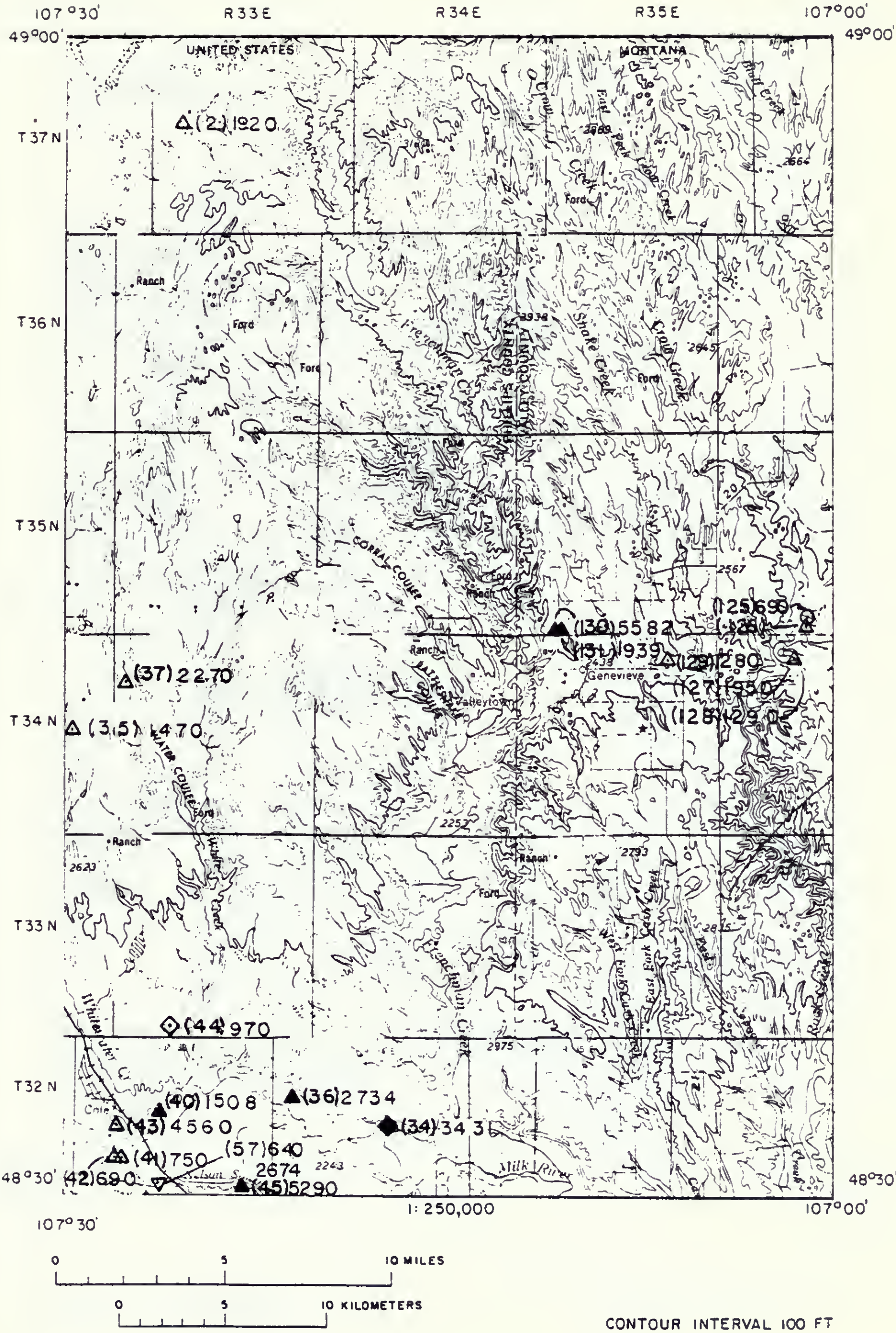


CONTOUR INTERVAL 100 FT

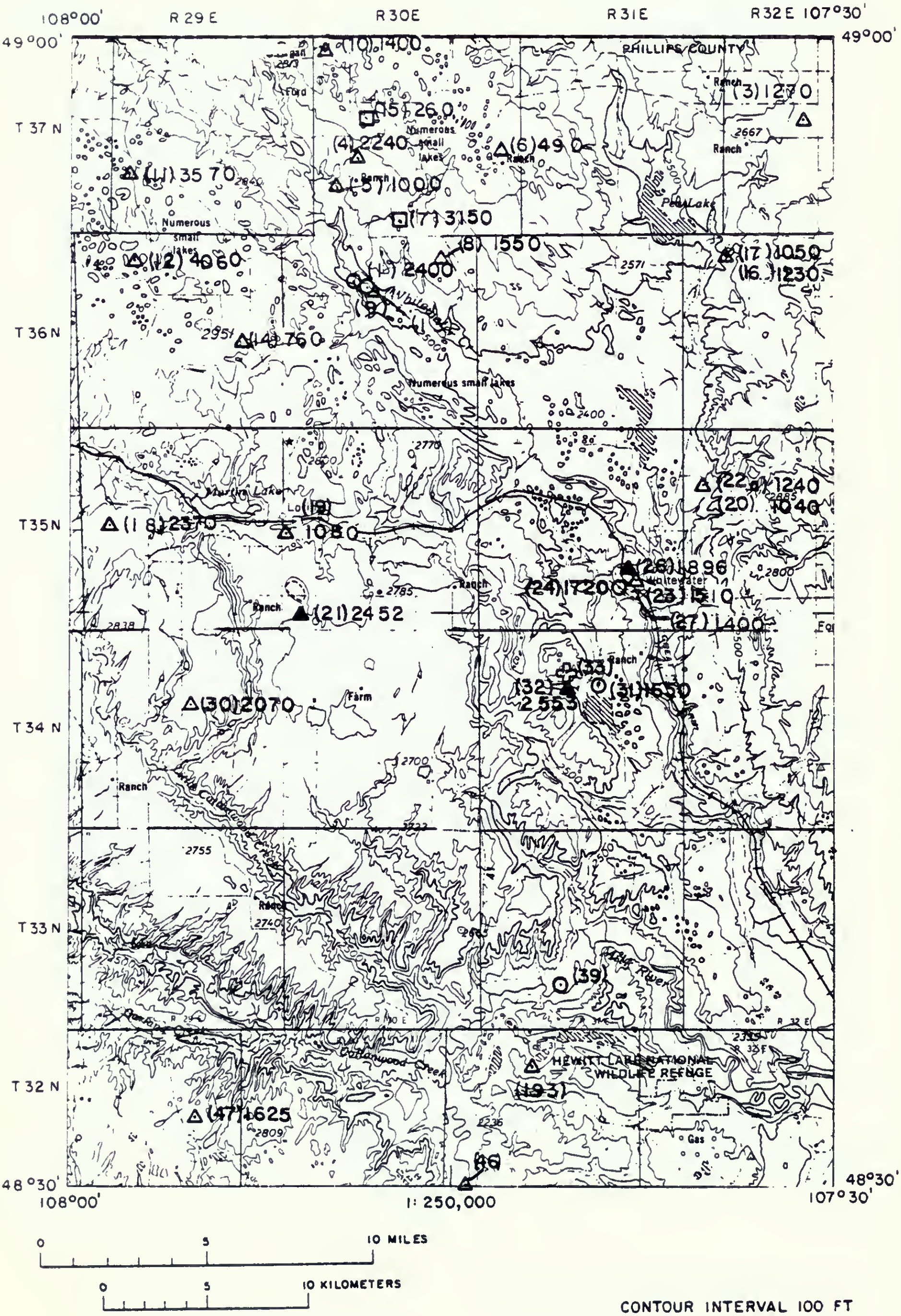
SPECIFIC CONDUCTANCE SURVEY

GLASGOW 3



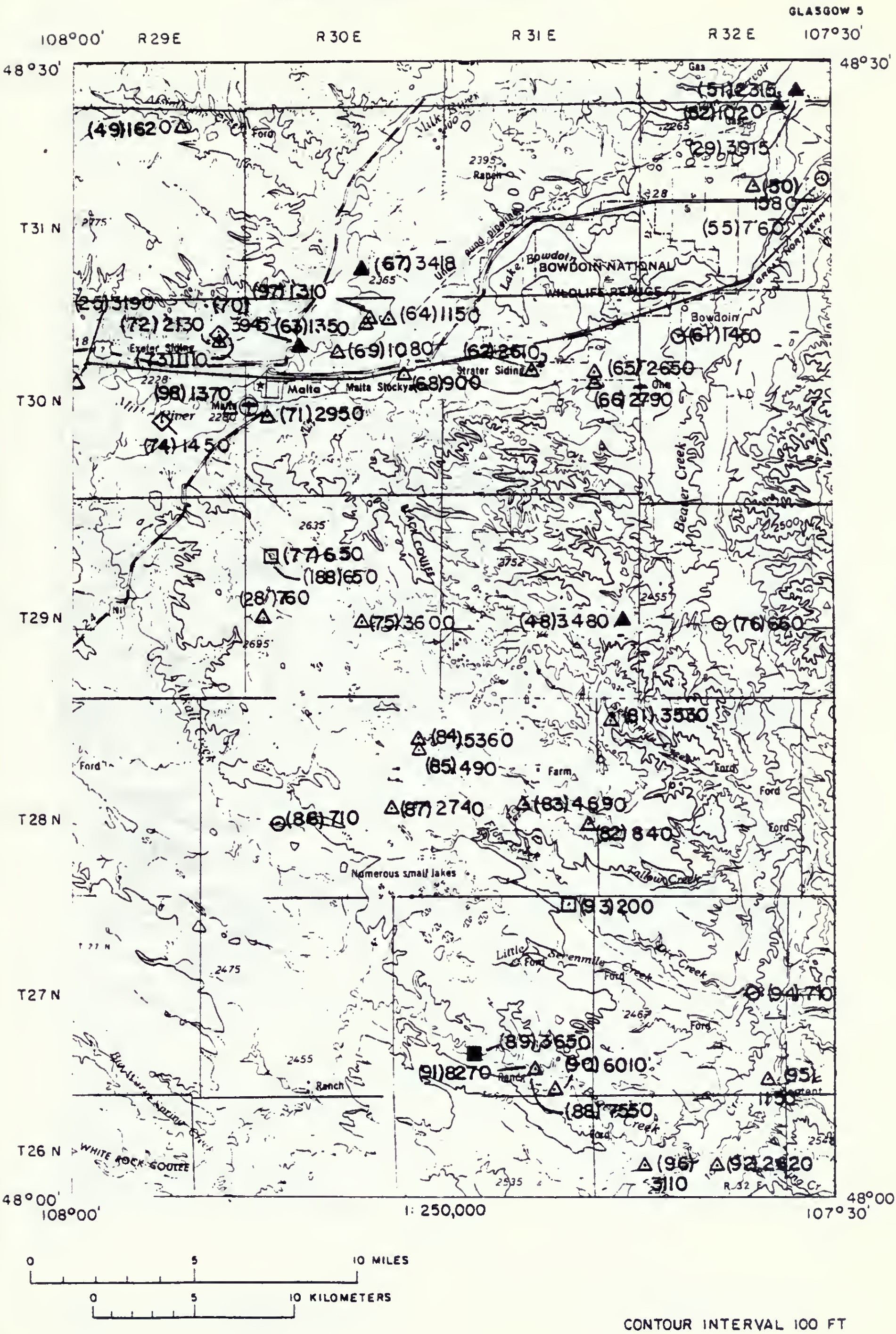
SPECIFIC CONDUCTANCE SURVEY

GLASGOW 4



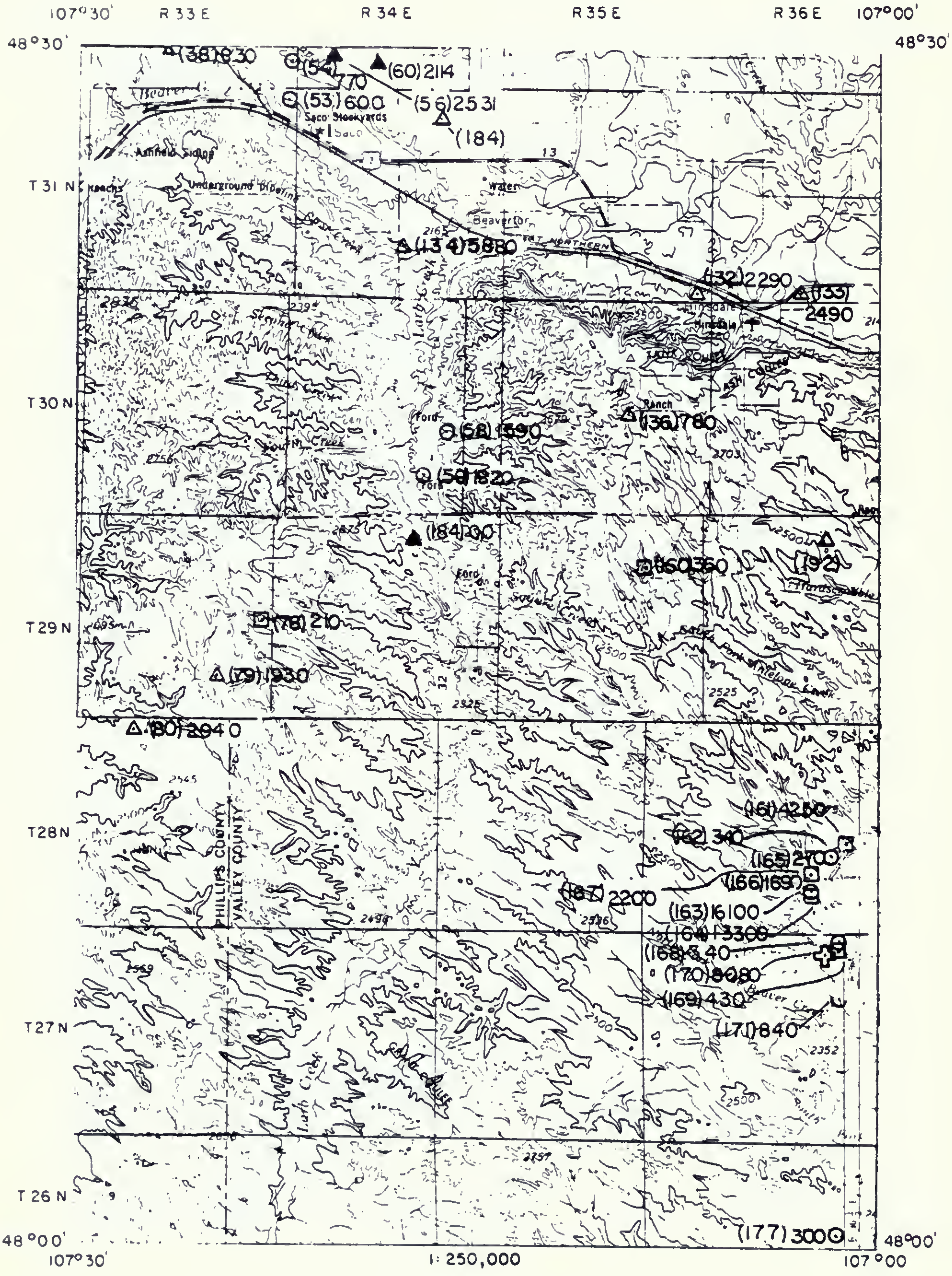
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY

GLASGOW 6



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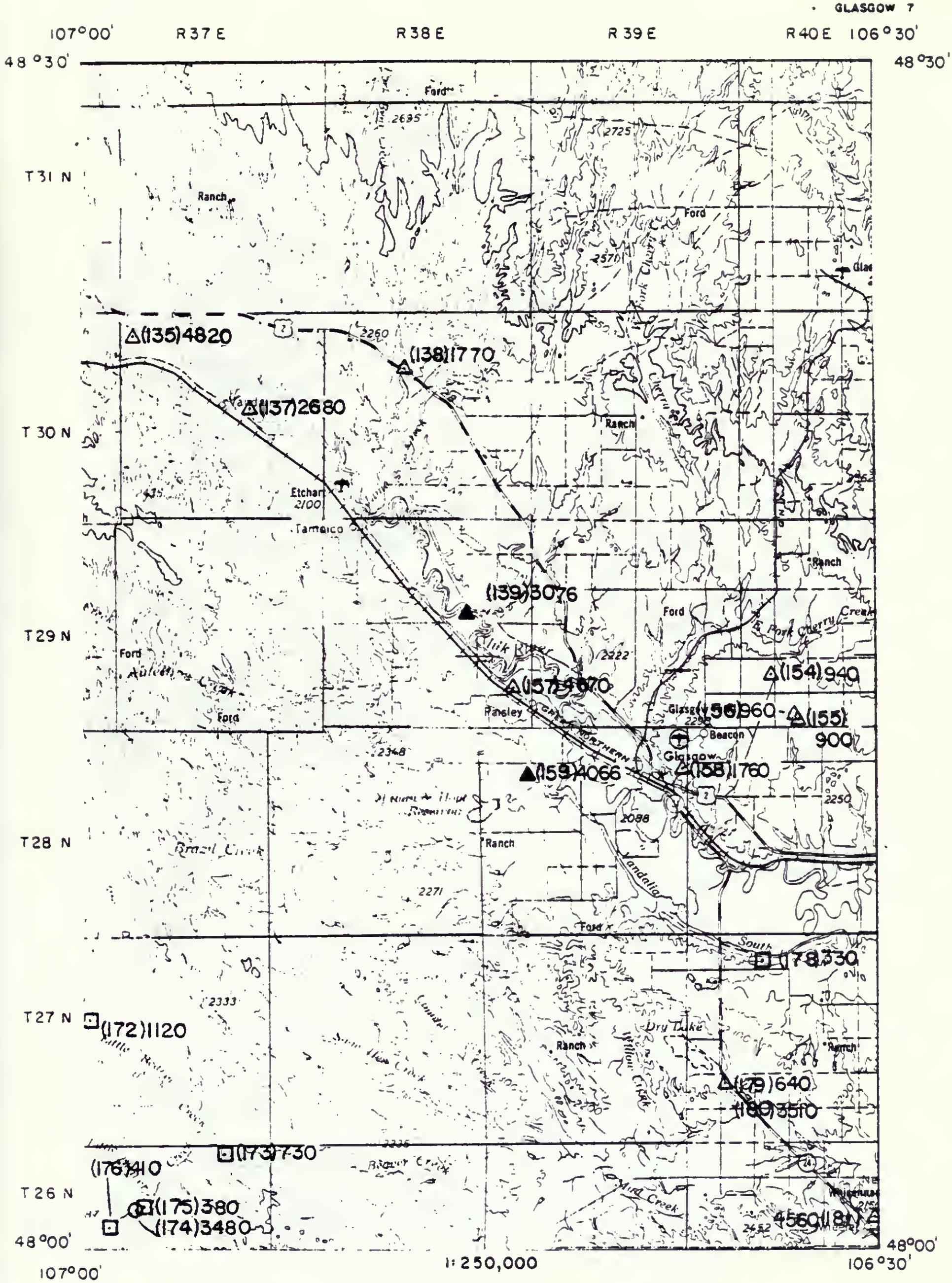
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



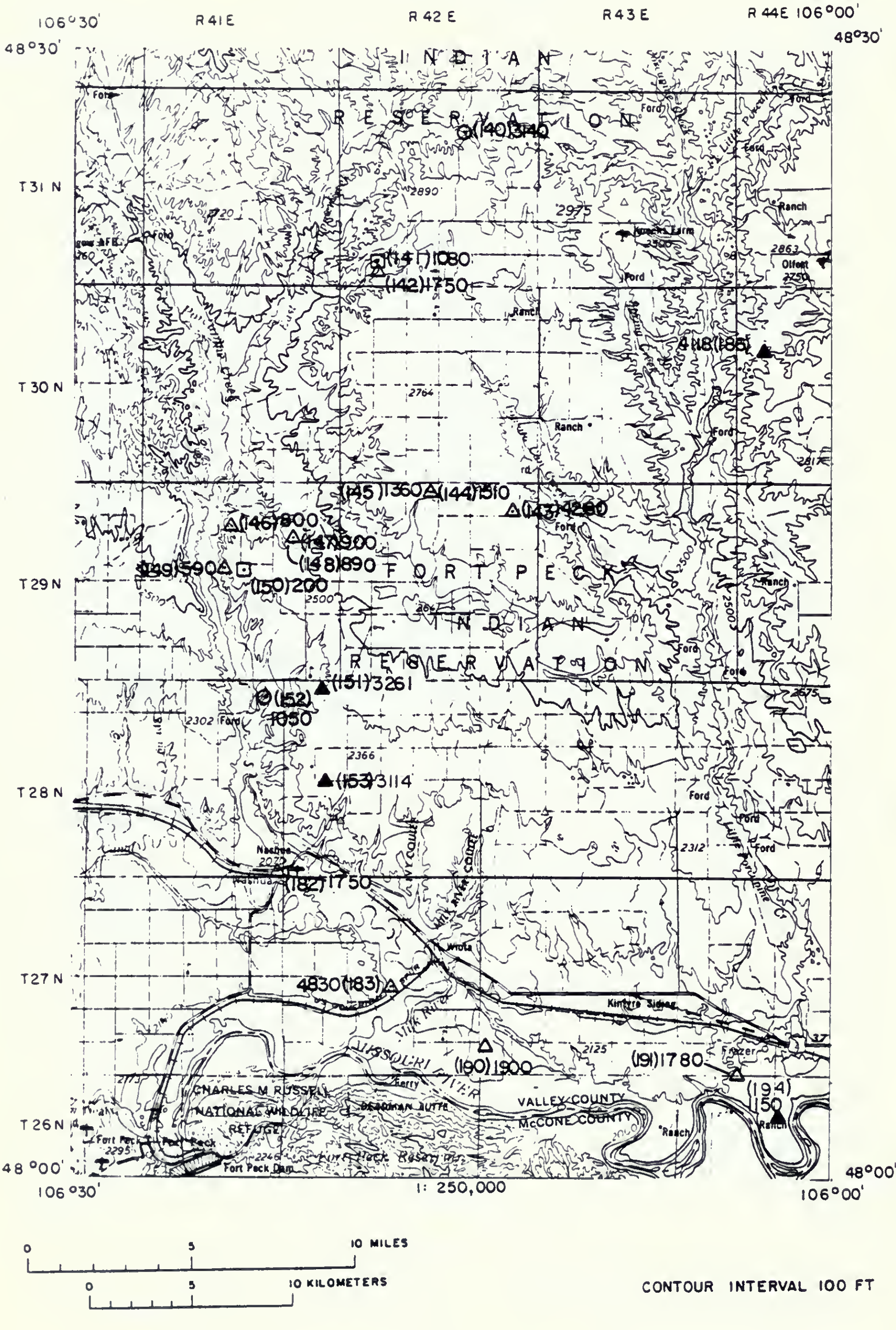
1:250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

GLASGOW 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25° C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG15	Phillips	36N 30E 09 BC	07 21 76	Creek	no flow	Small creek overgrown with weeds	2400	18.8	no	2500				
2	MBMG30	Phillips	37N 33E 18 DAD	07 22 76	Well		Domestic use except for drinking, has a bad taste	1920	22.8	no	2740	40	45		Hammond
3	MBMG29	Phillips	37N 32E 16 BAA	07 22 76	Well	8 gpm	Domestic and stock use	1270	8.8	no	2660	8	20		Math
4	MBMG10	Phillips	37N 30E 20 CB	07 21 76	Well	8 gpm	Stock use, iron stain	2240	12.3	no	2680	95	110		Simonson, L.
5	MBMG11	Phillips	37N 30E 30	07 21 76	Well	20 gpm	Domestic use, located 3500 feet S of house	1000	17.6	no	2610	66	199		Simonson, L.
6	MBMG12	Phillips	37N 30E 24	07 21 76	Well	10 gpm	Domestic use, water is analyzed every spring	490	12	no	2820	257	280		McMullen
7	MBMG13	Phillips	37N 30E 33	07 21 76	Reservoir		Stock use and waterfowl habitat	3160	27.2	no	2630				
8	MBMG14	Phillips	36N 30E 02 DAA	07 21 76	Well		Private water analysis shows high magnesium	1550	15.5	no	2750	90	125		Hellie
8	MBMG15	Phillips	36N 30E 09	07 21 76	Creek		Whitewater Creek, much algae			no					
10	MBMG8	Phillips	37N 30E 06 B	07 21 76	Well		Abandoned well, new well 5 feet from it	1400	12	no	2790	280	403		Ganter, A.
11	MBMG6	Phillips	37N 29E 30 ABB	07 22 76	Well	10 gpm	Stock use at abandoned ranch	3570	19.9	no	2840		300		Webb
12	MBMG7	Phillips	37N 29E 06 D	07 22 76	Well	15 gpm	Owner hauls drinking water	4060	11.1	no	2540	285	385		Drydahl
13	MBMG17	Phillips	36N 30E 09	07 21 76	Well		Domestic use except for drinking, rust in water			no					
14	MBMG18	Phillips	36N 29E 23 ADA	07 21 76	Well	20 gpm	Domestic use, water is soft, no filter used	760	13.7	no	2950	190	242		Johanesen
15	MBMG9	Phillips	37N 30E 17	07 21 76	Reservoir		Stock use	260	22	no	2750				Anderson
16	MBMG31B	Phillips	36N 32E 05 CAC	07 22 76	Well		Stock use	1230	10.3	no	2500		60		Anderson
17	MBMG31A	Phillips	36N 32E 05 CAC	07 22 76	Well		Domestic use	1060	11.8	no	2500		20		Lang
18	MBMG22	Phillips	35N 29E 18 DD	07 22 76	Well		Domestic and stock use, water is high in iron	2370	16.8	no	2850	230	287		Stordahl
19	MBMG23	Phillips	35N 30E 19 BBB	07 21 76	Well		Domestic use, need water softener	1080	14	no	2800		300		Dunbar
20	MBMG36B	Phillips	35N 32E 07	07 22 76	Well		Domestic use	1040	11.7	no	2460		30		Drydahl
21	MBMG24	Phillips	36N 30E 31	12 19 28	Well		Domestic use except for drinking	2452	11.7	yes	2800		220	211JDRV	Dunbar
22	MBMG36A	Phillips	36N 32E 07	07 22 76	Well		Domestic use, water is soft	1240	16.5	no	2460		10		Zimbelman
23	MBMG35	Phillips	36N 31E 25	07 22 76	Well		Domestic use	1510	14	no	2660		25		
24	MBMG33	Phillips	36N 31E 26	07 22 76	Creek		Whitewater Creek	1720	18.9	no	2650				
25	MBMG57	Phillips	30N 29E 18	07 21 78	Well		Stock use, water is hard	3190	9	no	2230		100		
26	MBMG32	Phillips	35N 31E 26	12 19 76	Well		Domestic use, water tastes 'funny' after a rain	1896	11.9	yes	2660		36		Anderson
27	MBMG34	Phillips	36N 31E 26 DB	07 22 76	Well		Domestic use	1400	14.3	no	2660		70		School district
28	MBMG59	Phillips	28N 30E 19	07 22 78	Well	8 gpm	Domestic use, but owners haul water in summer	760	9	no	2260		25		Waters, D.
29	76M1859	Phillips	32N 32E 35 CDB	07 22 78	Well		Resort well	3915	41.3	yes	2230		3188	331MDSN	Sleeping Buffalo Resort
30	MBMG26	Phillips	34N 29E 15 BB	07 22 78	Well	10 gpm	Domestic use	2070	13.7	no	2840	2	27		Morrison

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31	MBMG39	Phillips	34N 31E 10	07 02 76	Ditch		Along road, possible drainage from flowing well	1650	17.7	no	2410				
32	MBMG37	Phillips	34N 31E 09 DB	12 19 76	Well		Flowing well, domestic use	2553	9	yes	2500			112DRFT	Green, Jean
33	MBMG38	Phillips	34N 31E 09 DB	07 22 76	Seep		Result of flowing well			no	2480				Austin
34	MBMG80	Phillips	32N 34E 15 ACD	12 20 76	Spring		Domestic use, has bad odor and taste, filtration needed	3431	11	yes	2240				Whitaker
35	MBMG40	Phillips	34N 32E 14 DC	07 23 76	Well		Domestic use	1470	11	no	2740		90		Hanson
36	MBMG79	Phillips	32N 34E 07 DCC	12 20 76	Well	12 gpm	Stock use only, haul drinking water	2734	6	yes	2700	21	89	110ALVM	Lamb
37	MBMG41	Phillips	34N 33E 07	07 23 76	Well	8 gpm	Domestic and irrigation use	2270	10.1	no	2700		48		Olson
38	MBMG77	Phillips	32N 33E 28 CCA	07 23 76	Well	5 gpm	Domestic use	830	14.8	no	2190	15	40		Hanson
39	MBMG42	Phillips	33N 31E 28 CACC	07 23 76	Creek					no	2200				White
40	MBMG72	Phillips	32N 33E 16 BA	12 20 76	Well	15 gpm	Domestic use	1508	8	yes	2240	10	30		Eklund, A
41	MBMG75	Phillips	32N 33E 20 DAC	07 23 76	Well	10 gpm	Old stock well	750	14.4	no	2210	49	89		Costin
42	MBMG74	Phillips	32N 33E 20 DAC	07 23 76	Well	10 gpm	Domestic use	690	14	no	2210	50	85		Costin
43	MBMG73	Phillips	32N 33E 17 DA	07 23 76	Well	15 gpm	Stock use	4560	13	no	2220	27	118		Hanson
44	MBMG43	Phillips	33N 33E 32	07 23 76	Spring		Domestic use	870	16.1	no	2320				Haynes
45	MBMG78	Phillips	32N 33E 25 BCB	12 20 76	Well	1 gpm	Domestic use except for drinking, well yield decreasing	5290	9	yes	2180	60	135		Caves
46	MBMG71	Phillips	32N 31E 30 DBDA	07 22 76	River		Milk River			no	2200				Hanson
47	MBMG45	Phillips	32N 29E 14	07 22 76	Well		Domestic and stock use, water is high in sodium	1620		no	2300				Goeetz
48	56M0003	Phillips	29N 31E 24 DC	01 20 56	Well			3480		yes	2400			331MDSN	Ashfield
49	MBMG47	Phillips	31N 29E 02 DBA	07 22 76	Well		Domestic use	1820	14.8	no	2420	8	10		Barnards, Howard
50	MBMG88	Phillips	31N 32E 15	07 22 76	Well	8 gpm	Domestic use, use water softener, has a sulphur odor	1580	12	no	2250	90	141		Emanuelson
51	MBMG86	Phillips	31N 32E 02 BB	12 20 76	Well		Flowing well, water is hot, has a sulphur smell	2315	28	yes	2240	flowing			Sleeping Buffalo Resort
52	MBMG85	Phillips	31N 32E 02 BB	07 23 76	Well		Domestic use	1020	14.9	no	2240				
53	MBMG89	Phillips	31N 33E 01 A	07 24 76	Ditch		Irrigation ditch along road	600	24	no	2180				
54	MBMG83	Phillips	32N 33E 36	07 24 76	Ditch		Irrigation ditch, much algae	770	21	no	2180				
55	MBMG87	Phillips	31N 32E 13	07 22 76	Creek		Beaver Creek, N side of bridge	760	21	no	2280				
56	MBMG81	Phillips	32N 34E 29 CCC	12 20 76	Well	16 gpm	Domestic use	2531	9	yes	2280	83	86		Albus, Jerry
57	MBMG76	Phillips	32N 33E 28	07 23 76	Ditch		Irrigation ditch	640	24.5	no	2210				Hanson
58	MBMG99	Phillips	30N 34E 23	07 22 76	Creek		Larb Creek	1590	23	no	2270				Yaskas
59	MBMG100	Phillips	30N 34E 27	07 22 76	Well			1920	14	no	2270				
60	MBMG82	Phillips	32N 34E 33 BAA	12 20 76	Well		Water hardness at 14 grains per gallon	2114	7.6	yes	2260		53		Albus, Emil

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61	MBMG98	Phillips	30N 32E 08 BB	07 22 76	Creek		Full of moss	1450	20	no	2260				
62	MBMG65	Phillips	30N 31E 16	07 22 76	Well	8 gpm	Domestic use except for drinking	2610	11	no	2250	26	42		Swanson
63	MBMG93	Phillips	30N 30E 03 DCCA	07 23 76	Well		Domestic use	1360	10.4	no	2250				Arms
64	MBMG91	Phillips	30N 30E 02 CAB	07 23 76	Well	6 gpm	Domestic use, water is slightly hard with iron	1150	20.5	no	2260	30	65		Waters
66	MBMG96	Phillips	30N 31E 14	07 22 76	Well	10 gpm	Domestic use, water corrodes pipes, water softener needed	2660	14.5	no	2280		80		Stiles, C.
68	MBMG97	Phillips	30N 31E 14	07 22 76	Well	4 gpm	Stock use	2790	7	no	2280		60		Stiles, C.
67	MBMG84	Phillips	31N 30E 34 BACA	12 20 76	Well		Domestic use, but can't drink water even with softener	3418	12	yes	2220		80	110ALVM	Smith, Robert
68	MBMG94	Phillips	30N 30E 14	07 22 78	Well		Domestic use	900	26	no	2280	20	75		Mathews, L.
69	MBMG64	Phillips	30N 30E 09 DAC	07 23 78	Well		Domestic use	1080	11.9	no	2270		60		Sims
70	MBMG63	Phillips	30N 30E 08 ABCC	12 20 78	Well		Domestic use except for drinking, water used for irrigation	3945	0	yes	2240		300		Ryan
71	MBMG62	Phillips	30N 30E 19	07 22 76	Well	8 gpm	Domestic use, needs a water softener	2950	12	no	2700		150		Milk, B.
72	MBMG60	Phillips	30N 29E 12 BCA	07 21 76	Well	25 gpm	Located 400 feet S of house, water is soft	2130	17	no	2280	14	48		Holman
73	MBMG59	Phillips	30N 29E 12 BBDD	07 21 78	Spring	10 gpm	Located 100 feet N of house	1110	12.5	no	2280				Holman
74	MBMG58	Phillips	30N 29E 22	07 21 78	Spring		Domestic and stock use, improved spring in 1974	1460	9	no	2260	10	60		Green, Dale
76	MBMG101	Phillips	28N 30E 22	07 22 75	Well	20 gpm	Stock use, haul drinking and wash water	3600	13	no	2600	180	376	211JDRV	Lundman, G
76	MBMG102	Phillips	29N 32E 21	07 22 78	Creek		Beaver Creek	660	22	no	2280				
77	MBMG70	Phillips	29N 30E 07	07 22 76	Pond		At W side of road	650	19	no	2600				
78	MBMG103	Phillips	29N 33E 24	07 22 76	Pond	no flow	W side of road	210	20	no	2650				
79	MBMG104	Phillips	29N 33E 26	07 22 78	Well	18 gpm	Domestic use	1930	13	no	2600	60	120		Martin, F.
80	MBMG136	Phillips	28N 33E 04	07 22 76	Well	3 gpm	Domestic use except for drinking and stock use	2940	11	no	2530		250		Solberg, I.
81	MBMG136	Phillips	28N 32E 06	07 22 78	Well	12 gpm		3630	13	no	2600		300		Henry, G.
82	MBMG134	Phillips	28N 31E 24	07 22 76	Well	2 gpm	Stock and domestic use	840	15	no	2550				Anderson
83	MBMG133	Phillips	28N 31E 22	07 22 76	Well	2 gpm	Domestic use except for drinking	4680	12	no	2560	40	160		Bergsagel
84	MBMG131	Phillips	28N 31E 07	07 22 78	Well	1.5 gpm	Domestic use	5360	19	no	2650	60	120		Hendrickson
85	MBMG132	Phillips	28N 31E 07	07 22 76	Well		Stock use	490	9	no	2650		12		Hendrickson
86	MBMG129	Phillips	28N 30E 21	07 22 76	Creek	no flow		710	19	no	2450				
87	MBMG130	Phillips	28N 30E 24	07 22 76	Well	7.5 gpm	Domestic use	2740	14	no	2540	25	40		Lafdahl
88	MBMG139	Phillips	27N 31E 35 BDB	07 23 78	Well	1 gpm	Water is high in sodium and unfit for human use	7650	13.9	no	2400	flowing	90		
89	MBMG138	Phillips	27N 31E 28 CD	07 23 78	Pond	no flow	Seep outbreak around pond, algae sample taken	3660	28.5	no	2400				
90	MBMG140	Phillips	27N 31E 35 DDB	07 23 78	Well	1 gpm	Located 200 yards S of house	6010	12.2	no	2400	flowing	280		

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91	MBMG141	Phillips	27N 31E 35 BDB	07 23 76	Well	1 gpm	Located 250 yards W of house	9270	10.9	no	2400	flowing	90		Thompson
92	MBMG145	Phillips	26N 32E 15 A	07 23 76	Well	20 gpm	Water serves entire ranch, well located 400 feet from house	2620	14.6	no	2350		600		Barthelmes
93	MBMG137	Phillips	27N 31E 01 BBA	07 23 76	Reservoir	no flow	Located 100 yards S of section line	200	18	no	2500				
94	MBMG142	Phillips	27N 32E 14 DDC	07 23 76	Creek	17.7 cfs	Beaver Creek at gaging station	710	24.9	no	2460				
95	MBMG143	Phillips	27N 32E 36 DBA	07 23 76	Well	6 gpm	Water is hard	1150	14.1	no	2300	25	43		Oxarart
96	MBMG144	Phillips	26N 32E 17 AB	07 23 76	Well		Water is unfit for drinking, has a rancid odor	3110	18.2	no	2320	4			
97	MBMG92	Phillips	30N 30E 03 DADB	07 23 76	Well		Domestic use	1310	13	no	2250		40		McEwen
98	MBMG61	Phillips	30N 29E 24	07 21 76	Well		Domestic use	1370	17	no	2300				Henderson
99	MBMG10	Valley	37N 41E 06 BAB	07 26 76	Well	30 gpm	Domestic use, very hard water, uses ion exchanger	570	11.9	no	3000	18	70		U. S. Customs
100	MBMG11	Valley	37N 40E 08 CC	07 26 76	Well		Domestic use but have to distill it to drink it	600	12.8	no	3100	155	300		Omvig
101	MBMG12	Valley	37N 40E 08 CC	07 26 76	Well		Stock and domestic use, forms deposits on fixtures	620	8.6	no	3100	155	360		Omvig
102	MBMG14	Valley	37N 40E 20 BA	07 26 76	Well		Domestic use except for drinking, high iron content	1440	15.1	no	3060		160		
103	MBMG13	Valley	37N 40E 13 CC	07 26 76	Well		Domestic use	570	10.1	no	3000		300		Stellflug
104	MBMG18	Valley	37N 41E 25 DD	07 26 76	Well		Domestic and stock use	1990	6.7	no	2850		20		Nelson
105	MBMG15	Valley	37N 41E 25 DD	07 26 76	Well		Domestic use, water is very hard and bad tasting	2120	15.3	no	2850		8		Nelson
106	MBMG21	Valley	37N 42E 30 CC	07 26 76	Creek		Roanwood Coulee	660	20.5	no	2840				
107	MBMG20	Valley	37N 41E 35 BC	07 26 76	Well		Stock use	780	13.1	no	2850		28		Risa, Don
108	MBMG17	Valley	37N 41E 31 C	07 26 76	Well		Domestic use, water very hard	920	14.1	no	2950		100		Burtness
109	MBMG16	Valley	37N 41E 35 D	07 26 76	Well		Domestic and stock use, drinking water filtered	510	10	no	3100	20	60		Zimmer
110	MBMG19	Valley	37N 41E 35	07 26 76	Well	10 gpm	Domestic use, water is filtered because of high iron	570	10.3	no	2850	14	95		Risa, Don
111	MBMG32	Valley	36N 42E 04 BB	07 26 76	Well		Domestic use, water is high in iron, softener used	860	11.6	no	3000		130		Dryland
112	MBMG33	Valley	36N 42E 04 BC	07 26 76	Well		Stock use, water has a rusty color	920	10.1	no	3000				Dryland
113	MBMG23	Valley	36N 40E 02 BB	07 26 76	Well		Stock use, well is located 100 feet E of house	1220	9.2	no	3060				Isakson
114	MBMG22	Valley	36N 40E 02 BC	07 26 76	Well		Domestic use	570	10.4	no	3060		90		Isakson
115	MBMG24	Valley	36N 40E 10 AD	07 26 76	Well	10 gpm	Domestic use	630	12.7	no	3100	36	42		Westby
116	MBMG25	Valley	36N 40E 22 DA	07 26 76	Well		Domestic use, water is rusty colored, is filtered	650	10.1	no	3120	229	287		Hallock
117	MBMG26	Valley	36N 39E 26 AA	12 17 76	Well		Domestic use	768	10	yes	3050		40		Davenport, Don
118	MBMG27	Valley	36N 39E 28 BD	07 27 76	Well		Domestic use, water is moderately hard, use rust filter	1760	15.2	no	2950		100		Floyd, Ken
119	MBMG28	Valley	36N 39E 26	07 27 76	Well		Domestic use, rust filter used	1730	12.1	no	2950		20		Floyd, Ken
120	MBMG31	Valley	36N 39E 26	12 17 76	Well		Used for watering lawn, water is rusty colored	3507	6	yes	2900		20		Floyd, Robert

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121	MBMG29	Valley	36N 39E 26	07 27 76	Well		Stock use, located 500 feet E of house	1750	7.8	no	2900	5	12		Floyd, Robert
122	MBMG30	Valley	36N 39E 26	07 27 76	Well		Domestic use, located 100 feet E of house	1420	10.1	no	2900	5	16		Floyd, Robert
123	MBMG1	Valley	37N 36E 24 BC	07 27 76	Creek		West Fork Creek	490	21.1	no	2560				
124	MBMG2	Valley	37N 36E 25 BB	07 27 76	Reservoir		Rank smell, reservoir may be eutrophic	180	21.9	no	2570				
125	MBMG6	Valley	35N 36E 33 DC	07 27 76	Creek		Rock Creek, salts on banks, collected algal sample	690	21.9	no	2340				
126	MBMG5	Valley	35N 36E 33 DC	07 27 76	Well		Sand point in basement of house, water very hard, seep			no	2370		10		Jensen
127	MBMG8	Valley	34N 36E 04 DB	07 27 76	Well	5 gpm	Stock use	1950	14	no	2360	23	26		Luraas
128	MBMG9	Valley	34N 36E 04 DB	07 27 76	Well		Domestic use, water very hard, has been analyzed	1290	13.2	no	2360	26			Luraas
129	MBMG7	Valley	34N 35E 02	07 27 76	Well	11 gpm	Domestic use, has a soda taste	1280	9.9	no	2500		260		Johnson
130	MBMG3	Valley	35N 35E 32 CDD	12 17 78	Well		Domestic use except for drinking, water has been analyzed	5582	10	yes	2550	210	340	211JDRV	Arnot, Jim
131	MBMG4	Valley	36N 35E 32	12 17 78	Well		Domestic use, water is hard, yield is small	1938	8	yes	2550		10	112DRFT	Arnot, Jim
132	MBMG34	Valley	31N 35E 36	07 28 76	Well			2290	12.9	no					Heintz, John
133	MBMG35	Valley	31N 36E 33	07 28 76	Well	8 gpm	Domestic and stock use, water has been analyzed	2490	14.1	no		13	62		Heintz, John
134	MBMG90	Valley	31N 34E 27	07 22 76	Well		Domestic use except for drinking	5880	11	no	2200		30		Beatle, B
135	MBMG37	Valley	30N 37E 06 CADB	07 26 76	Well	6 gpm	Water is used for drinking, residents have gotten sick from it	4820	15.2	no	3130	104	155		Betz
136	MBMG36	Valley	30N 35E 22	07 26 76	Well	3 gpm	Domestic use	760	19.8	no	2750		60		Court
137	MBMG38	Valley	30N 37E 16 D	07 28 76	Well	20 gpm	Domestic use except for drinking and cooking	2680	17.7	no	2120	28	83		Vandalia Post Office
138	MBMG46	Valley	30N 38E 09 CA	07 28 76	Well	18 gpm	At highway rest area	1770	13.9	no	2230	37	72		Highway Department
139	MBMG47	Valley	29N 38E 14 CAAB	12 18 76	Well	10 gpm	Domestic use, water is soft	3076	12	yes	2100		187		Lighthizer, Oscar
140	MBMG58	Valley	31N 42E 10	07 27 76	Creek		East Fork Porcupine Creek	3140	18	no	2680				
141	MBMG59	Valley	31N 42E 32	07 27 76	Pond		Standing water in a coulee at roadside	1080	19	no	2700				
142	MBMG60	Valley	31N 42E 32	07 27 76	Well	6 gpm (E)	Domestic use, water is hard, use a softener	1760	15	no	2800	8	18		Tweteny
143	MBMG61	Valley	29N 42E 01	07 27 76	Well	4 gpm	Domestic use except for drinking	4280	17	no	2760		17		Movak, Joseph
144	MBMG62	Valley	29N 42E 04	07 27 76	Well		Domestic use	1510	11	no	2760		45		Allman, M
145	MBMG63	Valley	29N 42E 04	07 27 76	Well	8 gpm (E)	Domestic use	1360	10.5	no	2760		70		Nybakre, D.
146	MBMG48	Valley	29N 41E 09	07 27 76	Well	16 gpm (E)	Stock use	800	10.5	no	2260		10		Hill, C.
147	MBMG49	Valley	29N 41E 11	07 27 76	Well		Domestic use	900	12	no	2380		14		Geer, Miles
148	MBMG50	Valley	29N 41E 11	07 27 76	Well		Stock use	890	14	no	2380		20		Geer, Miles
149	MBMG52	Valley	29N 41E 18	07 27 76	Well	3 gpm	Domestic and stock use, neighbors haul water from them	690	12	no	2420		150		Hill, C.
150	MBMG51	Valley	29N 41E 15	07 27 76	Pond		Creek ponded by road	200	14.9	no	2410				

GLASGOW 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
151	MBMG109	Valley	28N 42E 05	12 17 76	Well	6 gpm (E)	Domestic use	3261	9	yes	2150	3	28		French, John
152	MBMG108	Valley	28N 41E 01 BD	07 27 76	Creek		Porcupine Creek	1050	25	no	2200				
153	MBMG110	Valley	28N 42E 20	12 17 76	Well	6 gpm (E)	Stock and domestic use	3114	9	yes	2300	19	35		Lauchner Bros
154	MBMG55	Valley	29N 40E 30 ADD	07 24 76	Well	8 gpm	Domestic use and lawn watering	940	14.8	no	2230	30	120		Miller
155	MBMG56	Valley	29N 40E 32 DCB	07 24 76	Well	3 gpm	Stock use	900	13.3	no	2340	98	107		Lindell
156	MBMG57	Valley	29N 40E 32 DD	07 24 76	Well	10 gpm	Domestic use	960	14.1	no	2340	86	111		Lindell
157	MBMG47B	Valley	29N 38E 25 CD	07 24 76	Well	5 gpm	Well is located behind house, water contains gas and salts	4670	23.9	no	2150	5	225		Cotton, Sidney
158	MBMG54	Valley	28N 39E 12	07 24 76	Well		Municipal well, Glasgow	1760	16.7	no	2100				Bell Motel
159	MBMG53	Valley	28N 39E 08	12 18 76	Well	5 gpm	Water is soft, contains natural gas	4066	12	yes	2110		300	211JDRV	Billingsley
160	MBMG36B	Valley	29N 35E 11	07 26 76	Reservoir	no flow	On South Fork Antelope Creek	360	23.1	no	2600				
161	MBMG39	Valley	28N 36E 24 AC	07 27 76	Pond	no flow	Clear water	4250	20.9	no					
162	MBMG40	Valley	28N 36E 24 CC	07 27 76	Pond	no flow	Muddy water	340	18.2	no					
163	MBMG44	Valley	28N 36E 26 DD	07 27 76	Creek	no flow	South Fork Brazil Creek, some alkali	16100	28.5	no					
164	MBMG45	Valley	28N 36E 26 DD	07 27 76	Pond	no flow	Clear water, alkali at edges	13300	17.2	no					
165	MBMG41	Valley	28N 36E 24 CC	07 27 76	Creek	0.3 cfs	Muddy water	270	20.5	no					
166	MBMG42	Valley	28N 36E 26 AA	07 27 76	Pond	no flow	Alkali around edges	1690	21.8	no					
167	MBMG43	Valley	28N 36E 26 A	07 27 76	Pond	no flow	Alkali around edges	2200	21.1	no					
169	MBMG65	Valley	27N 36E 01 AAC	07 27 76	Creek	no flow	Spillway Creek	340	19.4	no					
169	MBMG64	Valley	27N 36E 01 AD	07 27 76	Reservoir	no flow		430	20.1	no					
170	MBMG66	Valley	27N 36E 01 ACC	07 27 76	Seep	no flow	Below dam	8080	25.1	no					
171	MBMG67	Valley	27N 36E 12 DDA	07 27 76	Creek	no flow	Standing water in creek bed	840	21.5	no					
172	MBMG68	Valley	27N 37E 18 A	07 27 76	Pond	no flow	Contains blue-green algae	1120	22	no					
173	MBMG69	Valley	26N 37E 02 AB	07 27 76	Reservoir	no flow	Grub Reservoir, very muddy	720	20.1	no					
174	MBMG71	Valley	26N 37E 09 CC	07 27 76	Creek	no flow	Standing water, alkali around edges	3480	19.9	no	2300				
175	MBMG70	Valley	26N 37E 09 C	07 27 76	Reservoir	no flow	South Beaver Reservoir	380	20.8	no	2300				
176	MBMG72	Valley	26N 37E 17 BD	07 27 76	Reservoir	no flow	Itcaine Reservoir	410	20.1	no	2360				
177	MBMG73	Valley	26N 36E 13	07 27 76	Creek		Some alkali deposits along edges	300	18	no	2380				
178	MBMG95	Valley	27N 40E 04 DBD	07 28 76	Pond		Very silty	380	19	no	2100				
179	MBMG96	Valley	27N 40E 29 BB	07 28 76	Well		Stock use, yield small	640	14	no	2260	18	22		Hill, F.
180	MBMG97	Valley	27N 40E 29 BB	07 28 76	Well		Salts uphill from well	3610	14	no	2250	26	135		Hill, F.

GLASGOW 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
181	MBMG98	Valley	26N 40E 13 ABDB	07 28 76	Well		Haul water for domestic use	4560	12	no	2300		550		
182	MBMG111	Valley	28N 41E 36	07 27 78	Well		Domestic use except for drinking	1750	18	no	2200	60	680		Ihnot, J
183	MBMG112	Valley	27N 42E 22 B	07 27 78	Well		Stock use	4830	12	no	2050		30		Rorvik, J.
184	33M0009	Valley	31N 34E 02 C	09 28 33	Well		3 miles E of Saco			yes	2190			211FRNR	
185	56M0018	Valley	33N 43E 18 CA	08 24 58	Well		14.5 miles S of Richland	4633		yes	2844			337MSNC	
186	68M0009	Valley	30N 44E 07 DDD	07 26 68	Well		21.6 miles N of Frazer	4118		yes	2803			331CRLS	
187	not on map														
188	MBMG167	Phillips	28N 30E 07	07 22 78	Pond		On W side of road	650	19	no	2600				
189	MBMG17	Daniels	37N 43E 16	08 04 75	Reservoir		Loftsgard Reservoir	390		no					
190	47M0056	Valley	27N 43E 31 BBB	10 09 47	Well			1900	9.4	yes	2038		30	110ALVM	
191	63M0059	Valley	27N 44E 32 DCD	09 05 63	Well		1 mile SW of Frazer	1780	14.4	yes	2050		28	110ALVM	
192	57M0003	Valley	28N 36E 03 CAA	11 15 57	Well					yes	2451			211FRNR	
193	69M0005	Phillips	32N 31E 09 AB	06 20 69	Well		Muddy water				2415			217KOTN	
194	63M0056	McCone	26N 44E 10 BCC	09 05 63	Well		2.5 miles S of Frazer	1150		yes	2009		18	110ALVM	

GLASGOW

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
21	35N	30E	31		12	19	76	Well	76	105	362	7.1	1.46	.01	12.5	1111		33	475
26	35N	31E	26		12	19	76	Well	13	12.8	430	4.6	.13	.15	9.2	784	19.2	66.5	244
29	32N	37E	35	CDB	07	22	76	Well	490	174	293	25.4	.03	.02	17.1	151		195.5	2147
32	34N	31E	09	DB	12	19	76	Well	93.6	44	478	7.3	.90	.60	16.6	789	15.4	33	682
34	32N	34E	15	ACD	12	20	76	Spring	264	182	402	7.8	.11	.01	13.1	346		53	1834
36	32N	34E	07	DCC	12	20	76	Well	303	177	955	10	.12	1.53	12.7	742		406	2288
40	32N	33E	16	BA	12	20	76	Well	50	28	260	5.9	.05	.07	10.5	476		39	335
45	32N	33E	25	BCB	12	20	76	Well	5.8	4.0	1195	3.8	.05	.04	4.3	987		1339	.8
48	29N	31E	24	DC	01	20	55	Well	520	150	160*					156		100	1900
51	31N	32E	02	BB	12	20	76	Well	55	23.2	466	7.2	.10	.07	17.5	757		39	560
68	32N	34E	29	CCC	12	20	76	Well	140	42	442	5.9	.24	.19	18.4	724		95	716
60	32N	34E	33	BAA	12	20	76	Well	98	49.5	320	7.2	.15	<.01	16.2	416		118	563
67	31N	30E	34	BACA	12	20	76	Well	78	31	705	6.9	.54	.43	16.5	773		74	1072
70	30N	30E	08	ABCC	12	20	76	Well	546	164	310	25.2	.34	.02	15.4	150		209	2184
117	36N	39E	26	AA	12	17	76	Well	71.2	41.2	30	5.6	.04	<.01	17.8	268		30.4	136
120	36N	39E	26		12	17	76	Well	230	243	320	34.6	2.14	.55	16.7	1295		79	1069
130	35N	36E	32	CDD	12	17	76	Well	23.8	6.7	1350	5.0	.12	.03	7.4	666		126	2187
131	36N	36E	32		12	17	76	Well	196	126	92	15.3	.01	.11	13.5	664		16.5	621
138	29N	38E	14	CAAB	12	18	76	Well	3.2	1.0	760	2.0	.02	<.01	7.1	1179	9.6	464	.6
151	28N	42E	06		12	17	76	Well	179	99	463	6.3	<.01	.01	16.4	362		163	1131
153	28N	42E	20		12	17	76	Well	114	79.2	520	9.5	.01	.01	15.6	301		110	1263
159	28N	39E	08		12	18	76	Well	6.1	1.4	950	2.5	.07	<.01	7.9	1167		823	11.5
184	31N	34E	02	C	09	26	33	Well	59	64	3300*					310		5100	
186	33N	43E	16	CA	08	24	56	Well	430	78	840*					465		900	1500
188	30N	44E	07	DDD	07	26	68	Well	690	170	9600*					370		14000	3700
190	27N	43E	31	BBB	10	09	47	Well	161	61	193	16	.30		16	441		25	672
191	27N	44E	32	DCD	09	05	63	Well			228		.35			382			660
192	29N	36E	03	CAA	11	15	57	Well	39	18	3600*					660	74	5200	21
193	32N	31E	09	AB	06	20	89	Well	12	1	960	15				2110	84	180	58

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

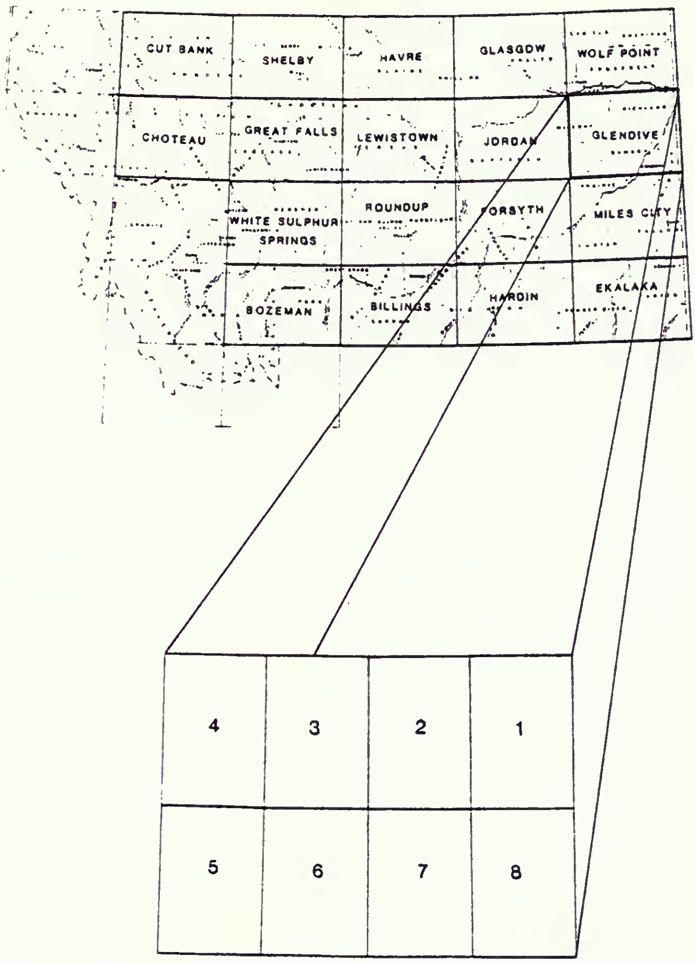
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
21	.029	.4	7.27	12	2452	1620	622	911	6.3	M8MG	220	211JDRV	yes	76M1508
26	.032	.8	8.57	10	1896	1186	85	875	20.3	M8MG	35		yes	76M1509
29	.039	2.9	7.38	41.3	3915	3419	1940	124	2.9	USGS	3188	331MDSN	yes	76M1859
32	.203	.4	8.53	9	2553	1763	415	673	10.2	M8MG		112DRFT	yes	76M1510
34	2.350	.3	7.64	11	3431	2929	1410	284	4.7	M8MG			yes	76M1614
36	<.023	.4	7.65	6	2734	4519	1480	609	10.8	M8MG	89	110ALVM	yes	76M1513
40	.165	.4	7.88	8	1508	964	240	390	7.3	M8MG	30		yes	76M1515
45	<.023	.9	8.29	9	5290	3040	31	810	93.5	M8MG	135		yes	76M1612
48			6.40				1920	128		Unknown		331MDSN	no	55M0003
51	<.023	.4	7.93	28	2315	1541	233	621	13.3	M8MG			yes	76M1516
56	.249	.4	7.63	9	2531	1817	552	594	8.4	M8MG	96		yes	76M1519
60	19.654	.5	7.77	7.5	2114	1396	448	341	6.6	M8MG	53		yes	76M1511
67	<.023	.6	8.25	12	3418	2366	322	634	17.1	M8MG	90	110ALVM	yes	76M1518
70	<.023	3.0	7.57	0	3945	3541	2040	123	3.0	M8MG	300		yes	76M1617
117	4.560	.2	7.47	10	766	469	347	220	.7	M8MG	40		yes	76M1500
120	.075	.3	7.28	6	3507	2623	1570	1060	3.5	M8MG	20		yes	76M1601
130	.041	.3	8.25	10	5582	4034	87	546	63.0	M8MG	340	211JDRV	yes	76M1502
131	.106	<.1	7.59	8	1939	1408	1010	545	1.3	M8MG	10	112DRFT	yes	76M1503
139	.059	2.7	8.41	12	3076	1831	12	983	95.1	M8MG	187		yes	76M1506
151	37.300	.1	7.78	9	3261	2293	854	297	6.9	M8MG	26		yes	76M1499
153	'10.620	.4	7.92	9	3114	2270	611	247	9.2	M8MG	35		yes	76M1498
159	.038	2.3	8.28	12	4066	2380	21	957	90.2	M8MG	300	211JDRV	yes	76M1507
184							411	254		Unknown		211FRNR	no	33M0009
185			7.60				1400	381		Unknown		337MSNC	no	56M0016
186			7.20				2420	303		Unknown		331CRLS	no	68M0009
190	1.355	.5	7.60	9.4	1900	1363	653	362	3.3	USGS	30	110ALVM	no	47M0056
191			7.70	14.4	1780		487	313	4.5	USGS	28	110ALVM	no	63M0059
192			8.50				171	865		Unknown		211FRNR	no	57M0003
193			8.30				34	1870		Unknown		217KOTN	no	69M0005

GLASGOW 1° x 2° Sheet

Trace Elements Analyses Sheet

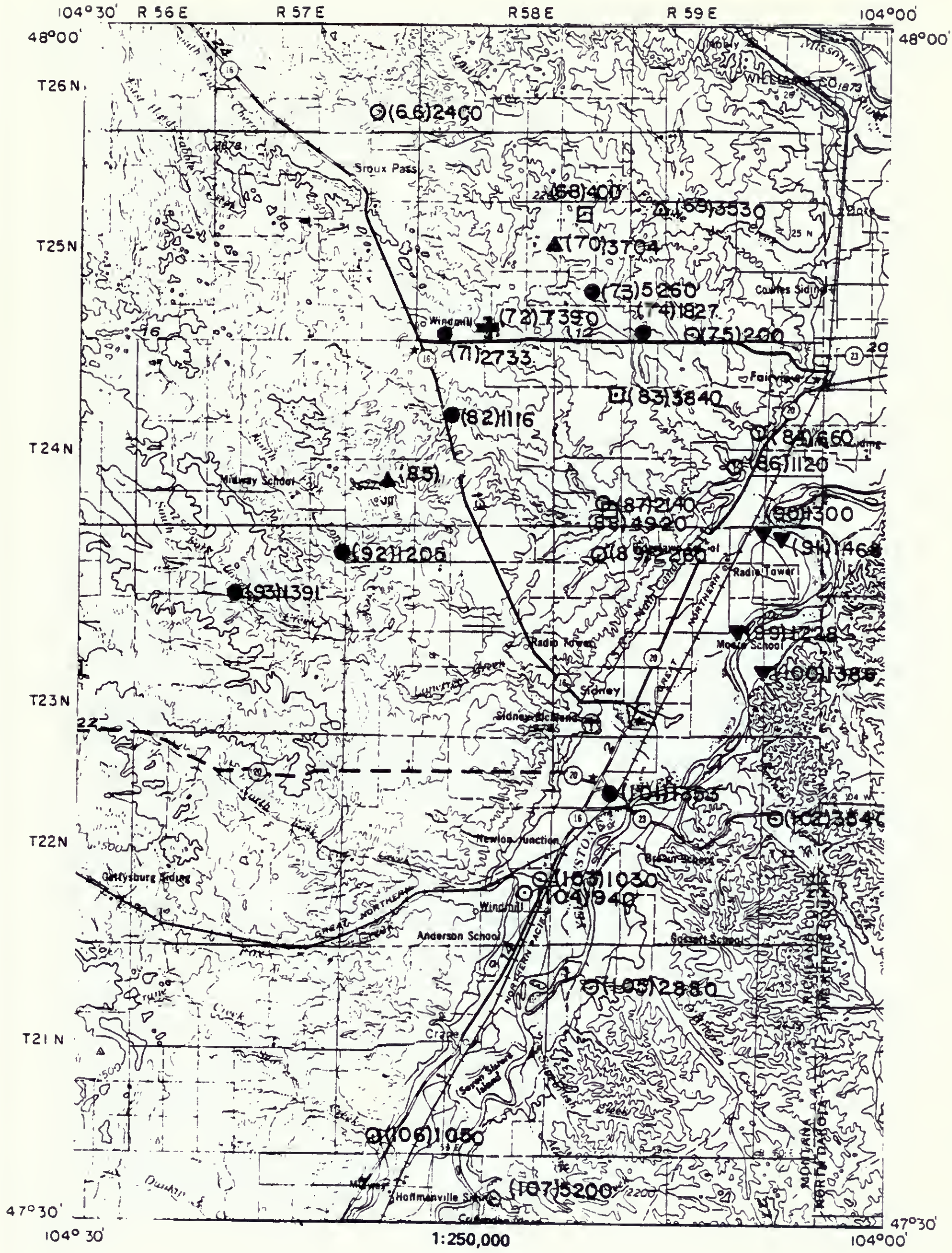
Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Leed (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphete (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
21	35N 30E 31	<.05	<.2	<2.0		.97		<.01	.01	<.05	.27	<.3	.01	.013	<2.0		1.95	.40	.02	76M1508
26	35N 31E 28	<.05	<.2	4.3		.80		<.01	<.01	<.05	.08	<.3	<.01	.264	<2.0		.29	.12	<.01	76M1509
29	32N 32E 36 CDB										.31			.072			12.10			76M1859
32	34N 31E 09 DB	<.05	<.2	<2.0		1.7		<.01	<.01	<.05	22	<.3	.01	.026	<2.0		1.19	.23	<.01	76M1510
34	32N 34E 15 ACD	.05	.44	<2.0		.75		<.01	.01	.05	20	<.3	.02	.062	41.6		2.60	.64	.01	76M1614
36	32N 34E 07 DCC	.09	.44	<2.0		1.8		<.01	.02	.09	.23	<.3	.04	.049	<2.0		3.24	.61	.92	76M1513
40	32N 33E 16 BA	.06	<.2	<2.0		.45		<.01	.01	<.05	.09	<.3	.01	7.55	<2.0		.42	.18	.25	76M1616
45	32N 33E 25 BCB	<.05	<.2	<2.0		3.3		<.01	.01	<.05	.16	<.3	<.01	.095	6		.61	.07	.06	76M1512
61	31N 32E 02 BB	.05	<.2	<2.0		.85		<.01	<.01	<.05	.10	<.3	.02	.104	<2.0		.87	.19	.01	76M1516
56	32N 34E 29 CCC	.08	<.2	<2.0		.68		<.01	<.01	<.05	.12	<.3	.03	.023	3.6		1.18	.30	1.44	76M1519
80	32N 34E 33 BAA	<.05	<.2	<2.0		.62		<.01	.01	<.05	.14	<.3	<.01	.023	115		.95	.24	.05	76M1511
67	31N 30E 34 BACA	.05	<.2	2.6		1.1		<.01	<.01	<.05	.14	<.3	<.01	.033	<2.0		1.14	.22		76M1518
70	30N 30E 08 ABCC	.07	.40	<2.0		1.1		<.01	.02	.10	.34	<.3	.04	.062	<2.0		12.70	.66	.01	76M1617
117	36N 39E 28 AA	.06	<.2	<2.0		.12		<.01	.16	<.05	.03	<.3	<.01	.020	37		.66	.27	.14	76M1600
120	36N 39E 26	.10	<.2	<2.0		.20		<.01	.02	.09	.58	<.3	.03	.018	<2.0		2.60	.71	.18	76M1501
130	35N 36E 32 CDD	.05	<.2	<2.0		2.2		<.01	.01	<.05	.27	<.3	.01	.033	<2.0		1.14	.10	.13	76M1502
131	35N 35E 32	.06	<.2	<2.0		.20		<.01	.01	.05	.09	<.3	.01	.016	<2.0		.36	.44	4.10	76M1503
139	29N 38E 14 CAAB	<.05	<.2	<2.0		6.2		<.01	.01	<.05	.14	<.3	<.01	.068	<2.0		.20	.06	.08	76M1606
161	28N 42E 05	.14	<.2	<2.0		.31		<.01	.13	<.05	.21	<.3	.01	.016	86		1.31	.44	.26	76M1499
163	28N 42E 20	.06	<.2	<2.0		.48		<.01	.02	.06	.28	<.3	.01	.023	62		1.69	.36	.45	76M1498
159	28N 39E 08	.08	<.2	<2.0		4.7		<.01	.01	<.05	.18	<.3	<.01	.062	<2.0		.35	.06	.06	76M1507

LOCATION BASE MAP



GLENDIVE 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY



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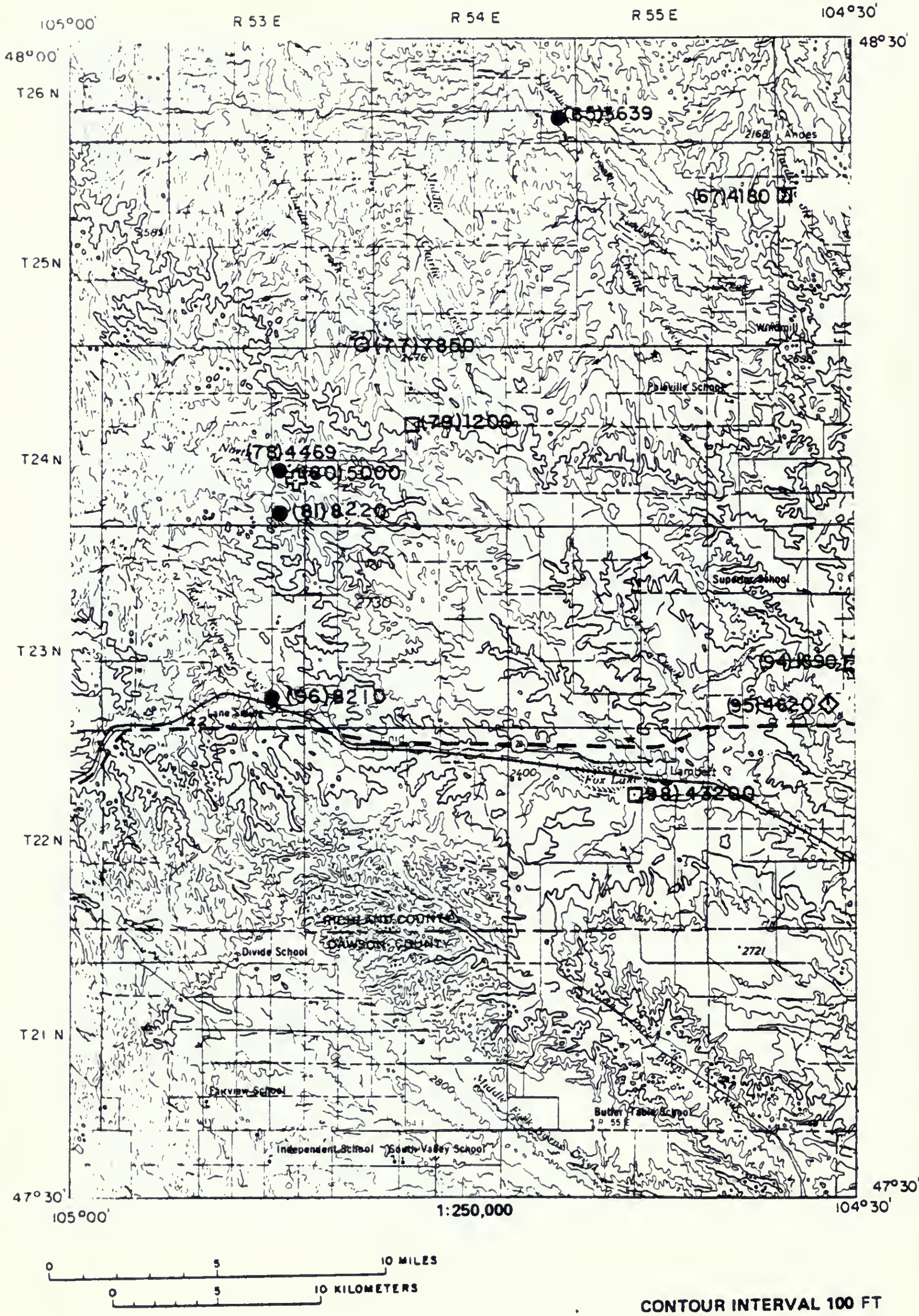
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

GLENDIVE 2



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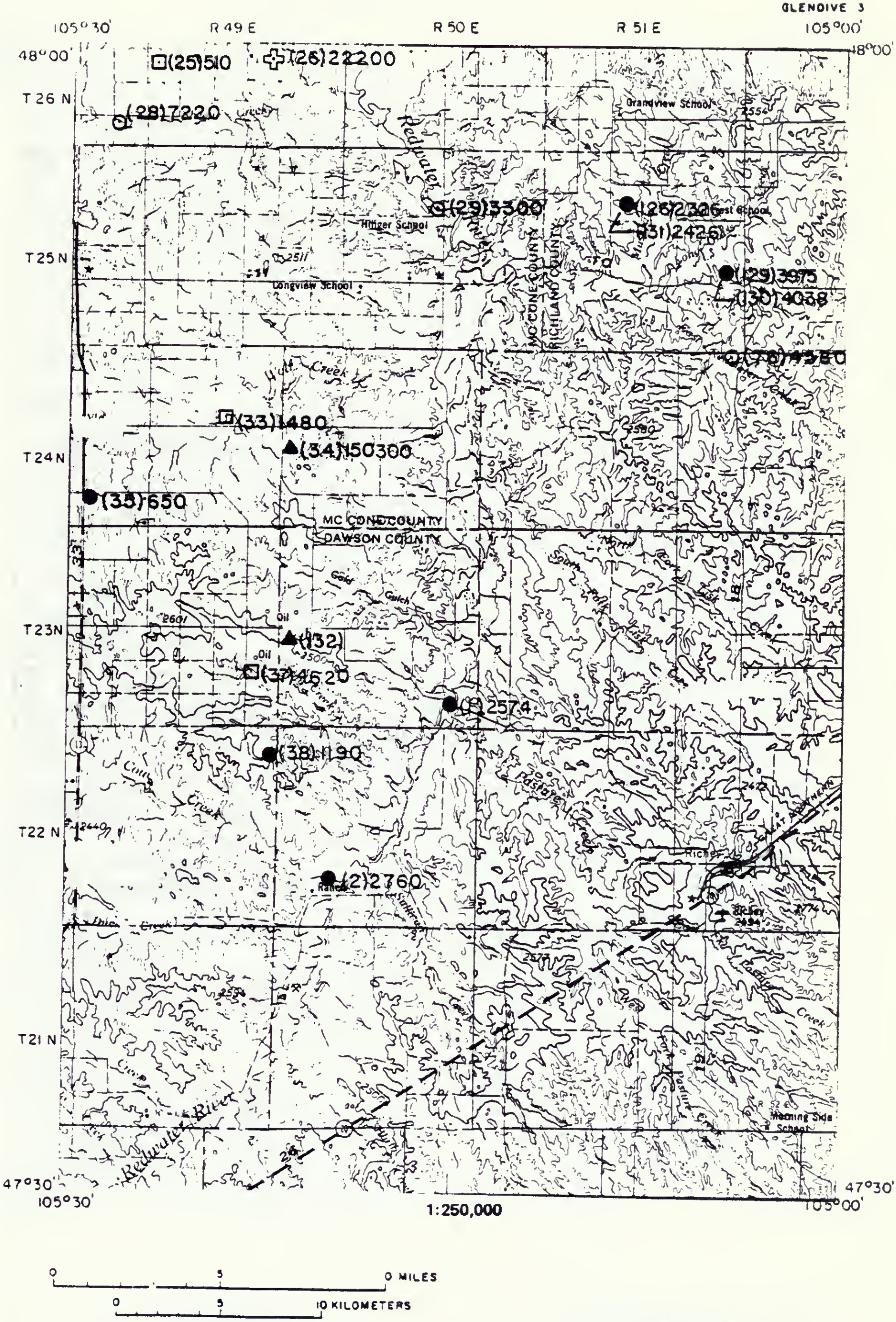
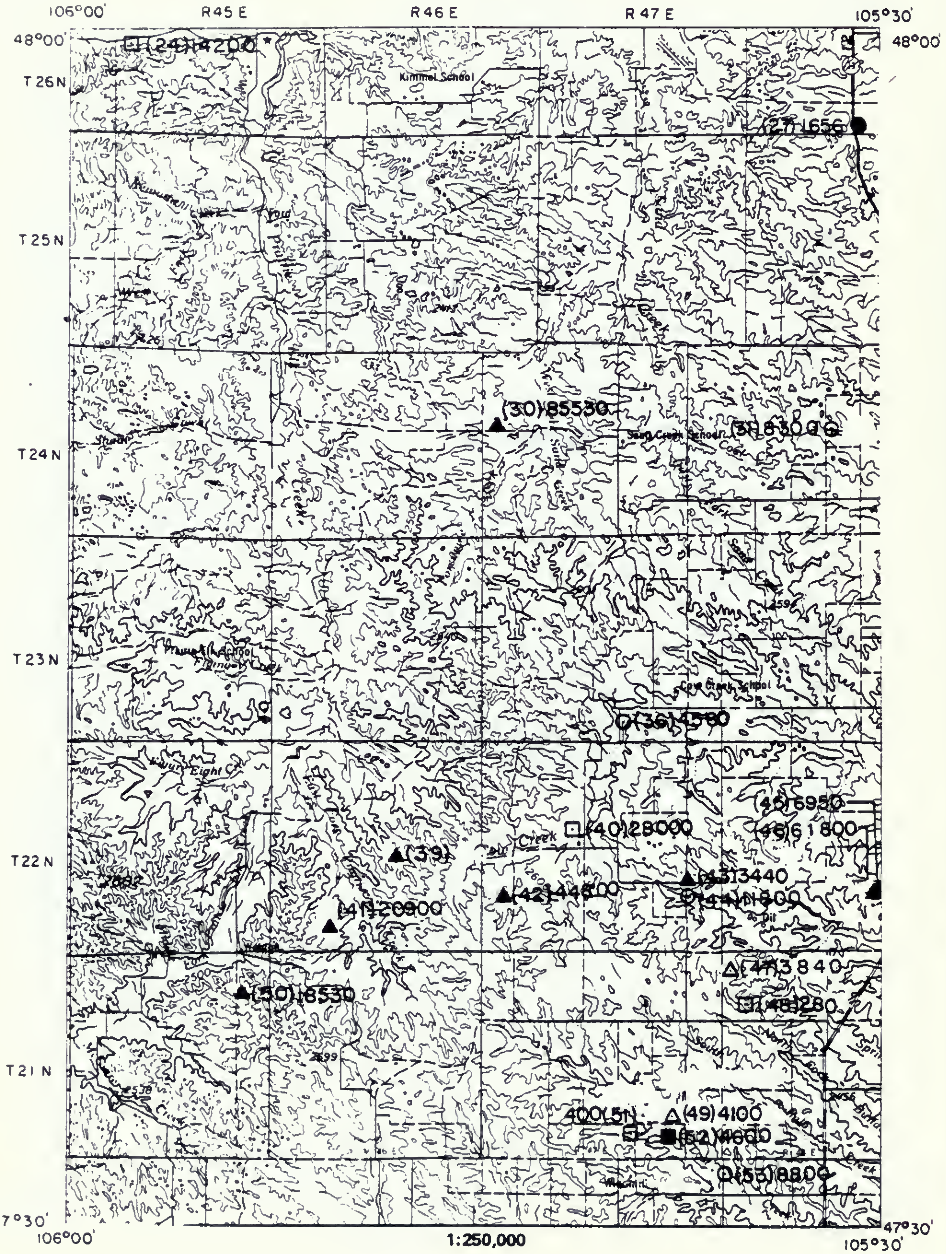


CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

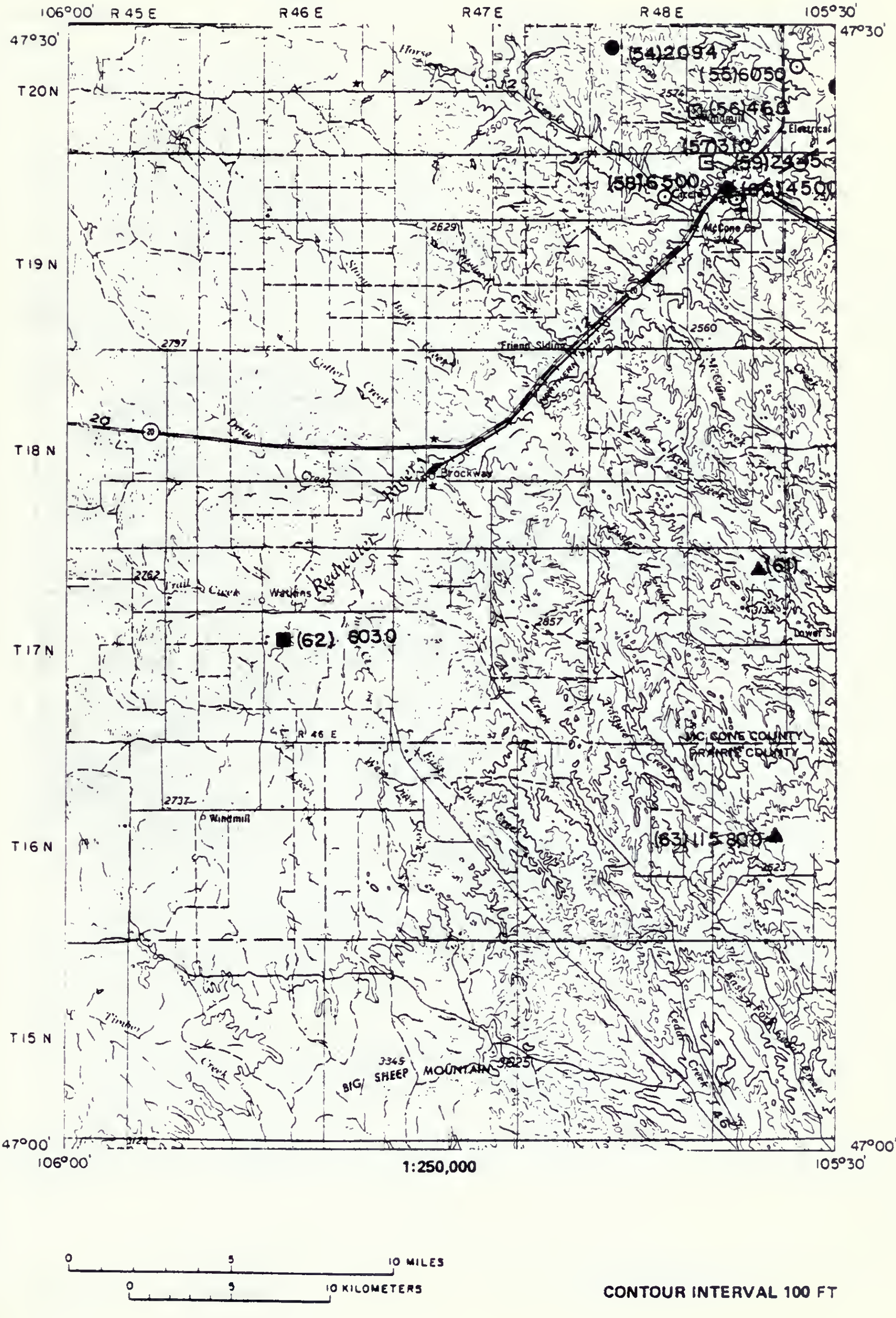


0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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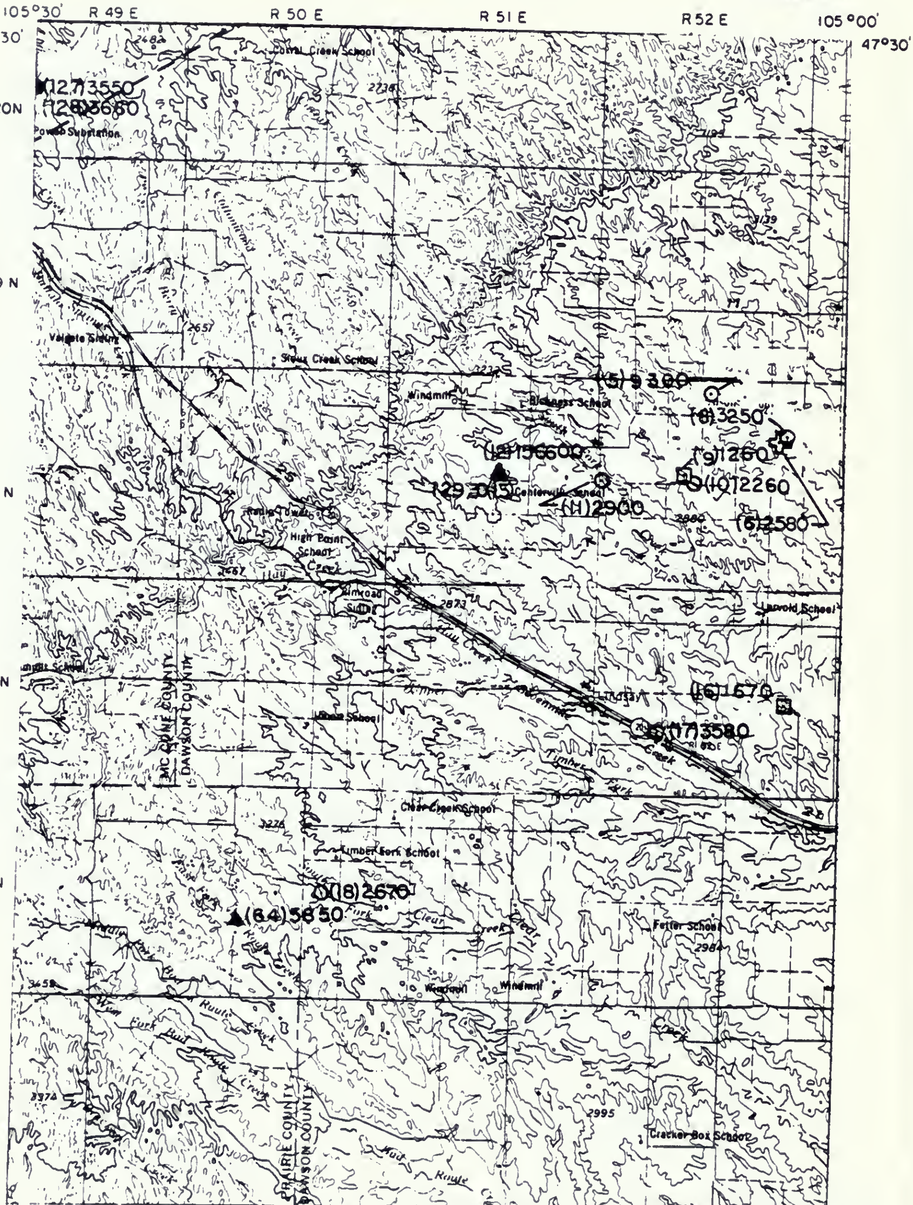

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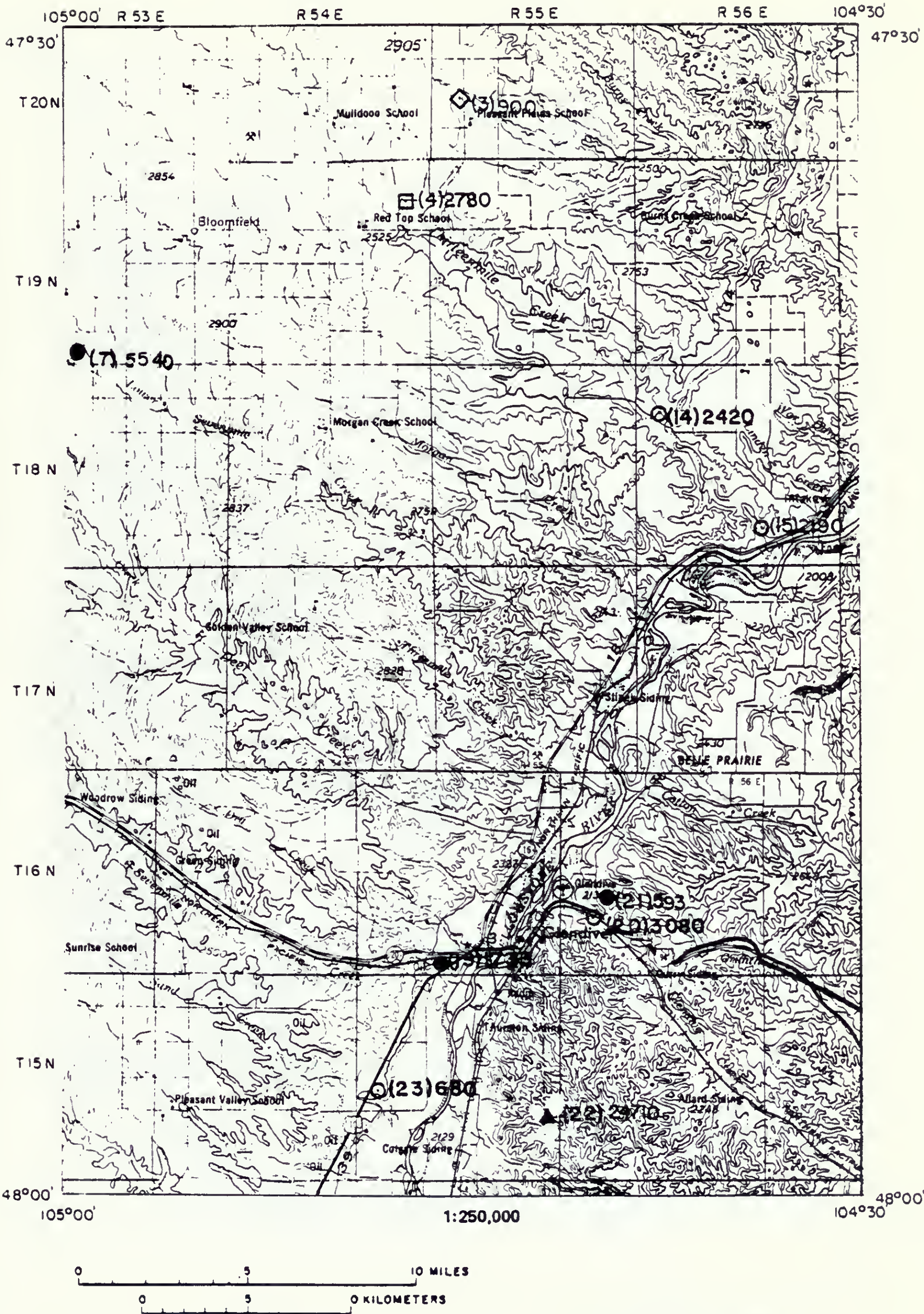
0 5 10 MILES

0 5 10 KILOMETERS

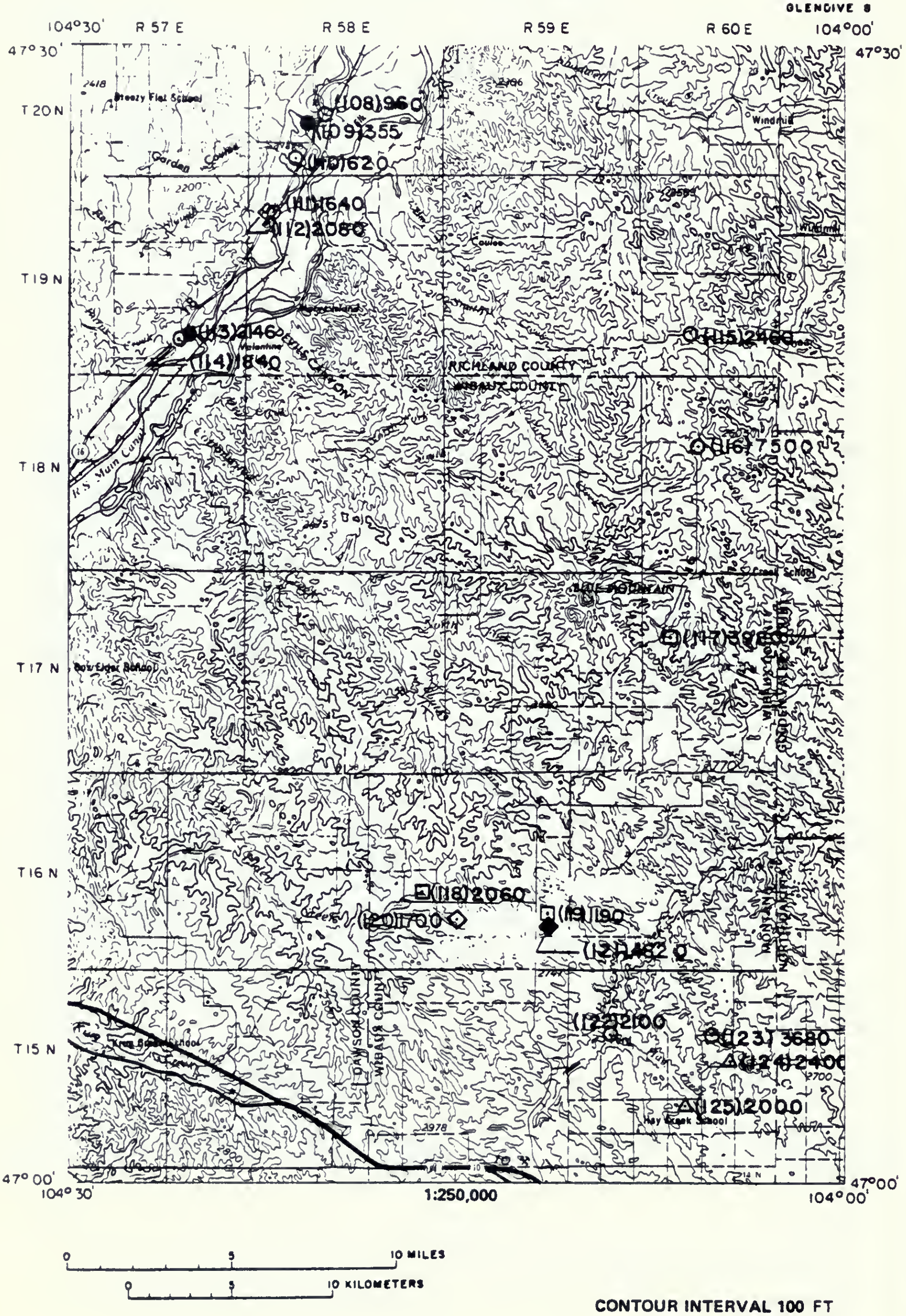
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



GLENDIVE 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or Yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	EPA24	Richland	23N 50E 36B	07 27 78	River		Redwater River	2574	22	yes					
2	WQB23	Dawson	22N 50E 29	07 27 76	River		Redwater River	2760	21	yes					
3	WQB4	Dawson	20N 55E 30 AA	09 06 75	Spring	no flow		900		no					
4	WQB3	Dawson	19N 54E 13 B	09 08 75	Reservoir		Some alkali along its sides, dryland farming area	2780		no					
5	WQB8	Dawson	18N 52E 03 BC	09 06 76	Creek		Some alkali along the sides, dryland farming area	9300		no					
6	WQB7	Dawson	18N 52E 12 CB	09 06 75	Seep		Vertical culvert in the middle of the seep	2580		no					
7	WQB5	Dawson	19N 53E 32 CD	09 06 75	Creek	no flow	Lower Seven Mile Creek, dryland farming area	5540	21	yes					
8	WQB6	Dawson	18N 52E 12	09 06 75	Creek	no flow	North Fork Lower Deer Creek, alkali along sides	3250		no					
9	WQB10	Dawson	18N 52E 16 D	09 06 75	Reservoir		Above Deer Creek, alkali present	1260		no					
10	WQB11	Dawson	18N 52E 16	09 06 75	Creek	0.5 cfs (E)	Deer Creek	2260		no					
11	WQB9	Dawson	18N 52E 18	08 06 75	Creek	no flow	South Fork Deer Creek	2900		no					
12	69M0013	Dawson	18N 51E 15 CC	03 20 69	Well			156600		yes	3010	711		337MSNC	Sinclair Oil and Gas Co.
13	69M0004	Dawson	18N 51E 16 CC	04 10 69	Well		9 miles NW of Lindsay	12930		yes	3010			217MDDY	
14	WQB2	Dawson	18N 56E 07	09 06 75	Creek	2 cfs (E)	Thirteen Mile Creek, rangeland	2420		no					
15	WQB1	Dawson	18N 56E 27	09 06 75	Creek	2 cfs (E)	Thirteen Mile Creek	2190		no					
16	WQB20	Dawson	17N 52E 24	08 07 75	Reservoir		Clear Creek Reservoir at Lindsay	1670		no					
17	WQB12	Dawson	17N 52E 28 A	09 06 76	Creek	0.5 cfs (E)	Upper Seven Mile Creek	3580		no					
18	WQB19	Dawson	16N 51E 18	09 07 75	Creek		South Fork Clear Creek	2670		no					
19	WQB22	Dawson	16N 55E 33 CD	03 16 76	Creek	1.6 cfs (E)	Seven Mile Creek near Glendive	1733		yes					
20	WQB13	Dawson	16N 56E 30 A	09 07 75	Creek	2 cfs (E)	Glendive Creek	3080		no					
21	WQB21	Dawson	16N 58E 20 CC	03 15 76	Creek	25 cfs (E)	Glendive Creek near Glendive	593		yes					
22	60M0008	Dawson	15N 55E 26 AB	07 19 60	Well		5 miles SE of Glendive	24710		yes				320AMSD	
23	WQB14	Dawson	15N 55E 19	09 07 76	Creek	6 cfs (E)	Sand Creek	680		no					
24	WQB35	McCone	26N 45E 19	09 01 75	Pond		Stock use, located below Missouri bluffs	14200		no					
25	WQB31	McCone	26N 49E 18	08 31 75	Reservoir		Small reservoir 100 yards above a saline seep	610		no					
26	WQB30	McCone	26N 48E 22 A	08 31 75	Seep		Two acres in size	22200		no					
27	WQB42	McCone	26N 48E 34 CC	03 18 76	Creek	0.1 cfs (E)	Sheep Creek near Wolf Point	1666	.2	yes					
28	WQB32	McCone	26N 48E 36 BA	08 31 75	Creek	no flow	Standing water in Sheep Creek	7220		no					
29	WQB18	McCone	25N 50E 09 D	08 30 75	Creek	2 cfs (E)	Redwater River	3300		no					
30	66M0028	McCone	24N 47E 18 CB	11 20 66	Well		28 miles N of Circle	85530		yes	2290			331CRLS	

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31	WQB18	McCone	24N 48E 14	08 30 75	Creek	no flow	Wolf Creek below reservoir, much alkali	8300		no					
32	not on map														
33	WQB17	McCone	24N 49E 14	08 30 75	Reservoir		Reservoir on Wolf Creek, alkali along sides	1480		no					
34	55M0046	McCone	24N 50E 19 CB	07 23 65	Well		17 miles NW of Richey	150300		yes	2400			331KBBY	
35	WQB45	McCone	24N 49E 31 BB	03 16 76	Creek	0.2 cfs (E)	Wolf Creek near Vida on highway 13	650	.2	yes					
36	WQB15	McCone	23N 47E 35	08 30 75	Creek		Cow Creek	4560		no					
37	WQB16	McCone	23N 49E 25	08 30 75	Reservoir		On Hay Creek, dryland farming area	4620		no					
38	WQB47	McCone	22N 49E 01 DA	03 16 76	Creek	2.7 cfs (E)	Cow Creek at highway 13 bridge near Circle	1190		yes					
39	65M0043	McCone	22N 46E 22 AA	02 22 65	Well		19 miles NW of Circle			yes	2600			331KBBY	
40	WQB14	McCone	22N 47E 18 AC	08 30 75	Pit		Emergency discharge pit, 2 pits both full	28000		no					
41	65M0044	McCone	22N 46E 32 AB	09 10 65	Well		19 miles NW of Circle	20900		yes	2580			331CRLS	
42	65M0045	McCone	22N 47E 30 BD	02 02 65	Well		18 miles N of Circle	44800		yes	2680			331KBBY	
43	WQB13	McCone	22N 48E 30 BB	08 30 75	Well		Stock use, rangeland	3440		no					
44	WQB12	McCone	22N 48E 30 B	08 30 75	Creek	no flow	Duck Creek	11800		no					
45	52M0002	McCone	22N 48E 25 BD	02 01 52	Well		18 miles N of Circle	6950		yes	2550			217DKOT	
46	52M0003	McCone	22N 48E 25 BD	02 10 52	Well		3 miles NE of Circle	61800		yes	2550			320AMSD	
47	WQB11	McCone	21N 48E 05 BC	08 30 75	Well		Stock use	3840		no					
48	WQB8	McCone	21N 48E 08	08 29 75	Reservoir		Small reservoir in dryland farming area	280		no					
49	WQB6	McCone	21N 47E 26 DC	08 29 75	Well		Well and hand pump in poor condition	4100		no					
50	65M0042	McCone	21N 45E 12 BB	09 10 65	Well		50 miles E of Winifred	18530		yes	2600			331KBBY	
51	WQB4	McCone	21N 47E 36 BD	08 29 76	Reservoir		On Lost Creek	400		no					
52	WQB7	McCone	21N 47E 30	08 29 75	Reservoir		Lost Creek Reservoir	4600		yes					
52	WQB5	McCone	20N 48E 03 BC	08 29 76	Creek		Lost Creek, alkali along banks, dryland farming area	8800		no					
54	WQB44	McCone	20N 48E 18 DA	03 16 76	Creek	2 cfs (E)	Lost Creek at highway 13 bridge near Circle	2094		yes					
55	WQB9	McCone	20N 49E 19	08 28 76	Creek	no flow	Lost Creek, much alkali	6050		no					
56	WQB3	McCone	20N 48E 27	08 29 75	Reservoir		Two acres in size	460		no					
57	WQB2	McCone	19N 48E 03 BC	08 29 76	Reservoir		Small reservoir	310		no					
58	WQB1	McCone	19N 48E 09 B	08 29 75	Creek	no flow	Horse Creek, dryland farming area	6500		no					
68	WQB43	McCone	19N 48E 11 BA	03 16 78	River	2.7 cfs (E)	Redwater River near Circle	2445		yes					
60	WQB10	McCone	19N 48E 11 B	08 28 75	River	1 cfs (E)	Redwater River at Circle	4500		no					

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61	69M0003	McCone	17N 48E 01 CC	11 02 69	Well		12 miles S of Circle			yes	2880			217MOOY	
62	WQ841	McCone	17N 46E 16 DD	09 02 75	Reservoir		On Redwater River, large seep area	6030		yes					
63	69M0002	Prairie	16N 49E 17 DO	11 28 69	Well		18 miles S of Circle	115800		yes	3370			217MDDY	
64	52M0004	Prairie	16N 50E 23 CB	03 10 52	Well		32 miles W of Glendive	5850		yes	3070			331CRLS	
65	WQB48	Richland	26N 54E 36 BAA	06 15 78	Creek	2 cfs (E)	Middle Charlie Creek	3639	23	yes					
66	WQB18	Richland	26N 57E 35	10 07 75	Creek	0.5 cfs (E)		2400		no					
67	WQB26	Richland	25N 56E 07	10 09 75	Reservoir		Five acres in size	4180		no					
68	WQB15	Richland	25N 58E 14	10 07 75	Reservoir		200 yards from road	400		no					
69	WQB16	Richland	25N 59E 18 AA	10 07 76	Well		Stock use, surrounded by seep	3530		no					
70	WQ855	Richland	25N 58E 22 AAC	12 16 76	Well		Unused	3704		yes					
71	WQB40	Richland	25N 58E 31 ODD	06 15 76	Creek	5 cfs (E)	North Fork First Hay Creek, algal sample taken	2733	18	yes					
72	WQB39	Richland	25N 58E 32 DOO	06 15 76	Seep	1 gpm (E)	Two miles E of Highway 16, algal sample taken	7390	18	yes					
73	WQB14	Richland	25N 58E 26 DD	10 07 75	Creek	no flow	Second Hay Creek	5260		yes					
74	WQB37	Richland	25N 59E 31 CCO	06 15 78	Creek	3 cfs (E)	Second Hay Creek	1827	19	yes					
75	WQB38	Richland	25N 59E 32 OCD	06 15 78	Creek	1 cfs (E)	Third Hay Creek	200		no					
76	WQB31	Richland	24N 52E 05	10 09 75	River	1 cfs (E)	East Fork Redwater River	4580		no					
77	WQB29	Richland	25N 53E 38	10 08 75	Creek	no flow	West Fork Charlie Creek	7860		no					
78	WQB48	Richland	24N 53E 25 BBB	06 15 76	Creek	0.5 cfs (E)	North Fork East Redwater Creek	4469	23	yes					
79	WQB47	Richland	24N 54E 15 CCC	06 15 76	Creek	no flow	West Fork Charlie Creek, dry except for small pools	1200		no					
80	WQB45	Richland	24N 53E 25	06 16 78	Seep	no flow		5000		no					
81	WQB44	Richland	24N 53E 36 CC	06 15 78	Creek	1 gpm (E)	Jeffrey Creek, algal sample taken	8220	19	yes					
82	WQB36	Richland	24N 58E 18 ODB	06 15 78	Creek	7 cfs (E)	First Hay Creek, algal sample taken	1118	10	yes					
83	WQB12	Richland	24N 58E 17 AA	10 07 75	Reservoir		Rangeland	3840		no					
84	WQB20	Richland	24N 59E 24	10 06 75	Creek	0.6 cfs (E)	Third Hay Creek	660		no					
85	63M0011	Richland	24N 58E 29 BCA	08 63	Well		11 miles SW of Fairview			yes	2380			331MDSN	
86	WQ821	Richland	24N 58E 25	10 08 76	Creek		Second Hay Creek	1120		no					
87	WQ811	Richland	24N 58E 32 A	10 07 75	Creek	2 cfs (E)	First Hay Creek, dryland farming area	2140		no					
88	WQ813	Richland	24N 58E 32 A	10 07 75	Reservoir		On Second Hay Creek, alkali below dam	4820		no					
89	WQ810	Richland	23N 58E 05 C	10 07 75	Creek	0.6 cfs (E)	Dryland farming area	2260		no					
90	WQ853	Richland	23N 60E 06 B	10 06 75	Canal	2 cfs (E)	Irrigation return canal	1300		yes					

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91	WQB52	Richland	23N 60E 06 A	10 08 75	Canal	2 cfs (E)	Irrigation return canal	1468		yes					Huntof
92	WQB41	Richland	23N 57E 01 DDD	06 15 76	Creek	6 cfs (E)	North Fork Lone Tree Creek	1205	19	yes					
93	WQB42	Richland	23N 57E 09 DDD	06 15 76	Creek	6 cfs (E)	South Fork Lone Tree Creek, algal sample taken	1391	19	yes					
94	WQB8	Richland	23N 56E 26 BC	09 08 75	Reservoir		Surrounded by dryland farming	1690		no					
95	WQB9	Richland	23N 56E 34 AD	09 08 75	Spring		Surrounded by dryland farming	4520		no					
96	WQB43	Richland	23N 53E 36 BBC	06 15 76	Creek	11 gpm (E)	East Redwater Creek, algal sample taken	8210		yes					
97	not on map														
98	WQB7	Richland	22N 55E 10 C	09 08 75	Lake		Water fowl management project, large alkali flat	43200		no					
99	WQB51	Richland	23N 59E 24 B	10 08 75	Canal	3 cfs (E)	Huntof farm irrigation return	1228		yes					
100	WQB54	Richland	23N 59E 25 A	10 08 75	Canal	2 cfs (E)	Irrigation return	1386		yes					
101	WQB22	Richland	22N 59E 08 DBB	10 08 75	Canal	3 cfs (E)	Irrigation return near Montana-Dakota Utility substation	1353		yes					
102	WQB23	Richland	22N 60E 18	10 08 75	Creek	<0.1 cfs (E)	Bonnie Peer Creek, some dryland farming	3540		no					
103	WQB35	Richland	22N 58E 25 ADC	06 15 76	Creek	20 cfs (E)	Fox Creek at bridge	1030		no					
104	WQB1	Richland	22N 58E 25	09 08 75	Creek	5 cfs (E)	Fox Creek	940		no					
105	WQB24	Richland	21N 59E 08	10 08 75	Creek	150 gpm (E)	O'Brien Creek, rangeland area	2880		no					
106	WQB34	Richland	21N 58E 32 CAA	06 15 76	Creek	6 cfs (E)	Sears Creek at bridge	1050		no					
107	WQB25	Richland	20N 59E 07	10 08 76	Creek	25 gpm (E)	Shadwell Creek, rangeland area	5200		no					
108	WQB6	Richland	20N 58E 28	09 08 76	Creek	1 cfs (E)	Dunlop Creek	960		no					
109	WQB33	Richland	20N 58E 29 ADD	06 15 76	Canal		Main irrigation return canal	356	16	yes					
110	WQB5	Richland	20N 58E 32	09 08 75	Coulee	1 cfs (E)	Garden Coulee	620		no					
111	WQB3	Richland	19N 58E 07	09 08 75	Creek	1 cfs (E)	Beef Slough Creek	1640		no					
112	WQB4	Richland	19N 58E 07 AB	09 08 75	Spring	1 cfs (E)	On W side of highway 200, much salts	2080		no					
113	WQB2	Richland	19N 57E 28 CCC	09 08 75	Creek	3 cfs (E)	Burns Creek	2146	16	yes					
114	WQB32	Richland	19N 57E 26 CCC	06 15 76	Creek	6 cfs (E)	Burns Creek at Nay Bridge	1840		no					
115	WQB10	Wibaux	19N 60E 29	09 03 75	Creek	no flow	Smith Creek	2460		no					
116	WQB9	Wibaux	18N 60E 17	09 03 75	Creek	no flow	C. S. Creek, much alkali, rangeland area	7500		no					
117	WQB8	Wibaux	17N 60E 07 D	09 03 75	Reservoir		Salts line reservoir, rangeland area	3980		no					
118	WQB6	Wibaux	16N 60E 20 DB	09 75	Reservoir		Salts line reservoir and coulee	2060		no					
119	WQB11	Wibaux	16N 59E 25 BD	09 03 76	Reservoir		One to two acres in size	1190		no					
120	WQB7	Wibaux	16N 60E 28	09 03 75	Spring		Lined with alkali, dryland farming area	1700		no					

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121	WQB12	Wibaux	16N 59E 25 CD	09 03 75	Spring	25 gpm (E)	Area surrounded by dryland farming	4820		yes					
122	WQB5	Wibaux	15N 60E 17 BB	09 03 75	Creek	2 cfs (E)	Beaver Creek N of Wibaux	2100		no					
123	WQB3	Wibaux	15N 60E 14 BB	09 03 76	Creek	0 5 cfs (E)	Little Beaver Creek	3680		no					
124	WQB4	Wibaux	15N 60E 14 DC	09 03 75	Well		Domestic well at an old homestead	2400		no					
125	WQB2	Wibaux	15N 60E 27 BC	09 03 75	Well		Uses a hand pump, dryland farming area	2000		no					
126	EPA RW2	McCone	25N 51E 09	07 27 76	River		Redwater River	2326	20.5	yes					
127	EPA RW5	McCone	20N 49E 20	07 27 76	River		Redwater River	3550	20	yes					
128	EPA RW5	McCone	20N 49E 20	07 28 76	River		Redwater River	3660	23	yes					
129	EPA EF1	McCone	25N 51E 24	07 27 78	River		Redwater River	3975	22	yes					
130	EPA EF1	McCone	25N 51E 24	07 28 78	River		Redwater River	4038	24	yes					
131	EPA RW2	McCone	25N 51E 09	07 28 76	River		Redwater River	2426	20.5	yes					
132	52M0005	McCone	23N 50E 19 BCO	05 16 52	Well					yes				337MSNC	

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Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
1	23N	51E	36		07	27	67	River	47.3	65	486	8.1	<.01			467	34	18	980
2	22N	50E	29		07	27	76	River	37.3	77	537	8.3	<.01			457	31	10	1096
7	19N	53E	32	CD	09	23	78	Creek	280	410	280	45				739		64	2250
12	18N	51E	15	CC	03	20	69	Well	4700	580	46000	1800				512		80000	2800
13	18N	51E	15	CC	04	10	68	Well	44	7	3200	34				1760	96	3500	630
19	16N	56E	33	CD	03	15	76	Creek	56	72	250	5.5				468	2	10.3	575
21	16N	56E	20	CC	03	15	76	Creek	21.2	10.7	85	6.7				181		4	145
22	15N	56E	25	AB	07	19	60	Well	2600	570	120000*					122		190000	2400
27	26N	48E	34	CC	03	16	78	Creek	64	56	245	14.9				223		7.1	715
30	24N	47E	18	CB	11	20	66	Well	1300	180	22000*					305	42	31000	7900
34	24N	50E	19	CB	07	23	56	Well	1700	140	46000	540				146		73000	3100
35	24N	49E	31	BB	03	16	78	Creek	39.8	21.5	42	12.5				132		3.7	177
38	22N	49E	01	DA	03	16	78	Creek	53	39.3	135	12.3				256		3.7	375
39	22N	46E	22	AA	02	22	65	Well	560	56	3000*					173		4200	2000
41	22N	46E	32	AB	09	10	65	Well	500	64	4500	180				354		4800	4400
42	22N	47E	30	BD	02	02	65	Well	1300	220	9500	200				207		16000	2800
45	22N	48E	25	BD	02	01	52	Well	6		1900*					1960	50	1100	970
46	22N	48E	25	BD	02	10	52	Well	510	50	19000*					560		26000	7000
50	21N	45E	12	BB	09	10	65	Well	360	47	4400	70				488		3600	5000
52	71N	47E	36		08	29	75	Pond	28.5	247	800	13.1				301	170	1.5	2240
54	20N	48E	18	DA	03	16	76	Creek	36.9	68	350	15.5				368		4	810
59	19N	48E	11	BA	03	16	76	Creek	81	93	365	10				392		9.9	1020
81	17N	48E	01	CC	11	02	69	Well	12	17	2600*					2030	24	2800	32
62	17N	46E	16	DD	09	27	75	Reservoir	51	331	1150	18.1				178	114	12	3460
63	16N	49E	17	DD	11	26	69	Well	18	8	2400*					1980		2600	22
64	16N	50E	23	CB	03	10	52	Well	360	43	1100*					200	59	1100	1600
66	26N	54E	36	BAA	06	15	76	Creek	40.9	97	728	11	.26	.07		395	38	7.8	1810
70	25N	58E	22	AAC	12	16	76	Well	463	280	155	19				573		78	1880
71	25N	58E	31	DDD	06	15	76	Creek	196	233	139	16	<.01	.05		357		1.8	1400
72	25N	58E	32	DDD	06	15	76	Seep	202	404	1215	78	.26	.35		781		17	4100
73	25N	58E	28	DD	10	07	75	Creek	117	184	935	18				543	13	88	2400
74	25N	59E	31	CCD	06	15	76	Creek	72	52	272	10	.45	.08		301		7.2	700
78	24N	53E	25	BBB	06	15	76	Creek	97	180	774	17	.33	.11		549		7.5	2025
81	24N	63E	38	CC	06	15	76	Creek	157	371	1568	20	<.01	.06		382		8	4850
82	24N	58E	16	DDB	06	15	76	Creek	84	49.8	74	13	.54	.04		233		9.5	380
85	24N	58E	29	BCA	08		63	Well	12000	1300	110000*					146		200000	280
90	23N	60E	06	B	10	08	75	Canal	71	67	126	8				518		12.3	270
91	23N	60E	08	A	10	08	75	Canal	32.9	90	175	9.4				537		12.8	360
92	23N	57E	01	DDD	06	15	76	Creek	98	68	53	14	.08	.04		220		4.2	460
93	23N	57E	09	DDD	06	15	76	Creek	110	111	38	11	.17	.06		296		10	540
96	23N	53E	36	BBC	06	15	78	Creek	64	243	1940	15	.20	.06		558	18	10.5	4560
99	23N	59E	24	B	10	08	75	Canal	91	67	81	9.5				467		10.9	280
100	23N	59E	25	A	10	08	75	Canal	107	74	102	14				683		20.8	190
101	22N	58E	08	DBB	10	08	76	Creek	75	73	127	9				639		10.8	290
109	20N	58E	29	ADD	06	15	78	Creek	32.1	4.4	34	2.8	25	.70		108		5	75

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters

Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
1	.03		8.84	22	2574	1866	388	439	10.8	EPA			Yes	76W1714
2	.01		8.78	21	2760	2046	410	427	11.5	EPA			Yes	76W1715
7	.02		7.9	21	5540	3693	2390	606	2.5	WQB			No	76W2342
12			6.7			134300	14100	420	168	Unknown		337MSNC	No	63M0010
13			8.3			8378	139	1600	118	Unknown		217MDDY	No	69M0004
19	.09		8.42		1733	1427	434	378	5.2	WQB			No	76W0482
21	.26		7.91		593		97	132	3.6	WQB			No	76W0483
22			4.40				8340	100		Unknown		320AMSD	No	80M0008
27	1.9		7.51	.2	1656		390	183	5.4	WQB			No	76W0488
30			8.8				3990	320		Unknown		331CRLS	No	66M0028
34			7.1			124600	4820	120	288	Unknown		331KBBY	No	65M0046
35	.06		7.37	.2	650		188	108	1.3	WQB			No	76W0487
38	.37		7.63		1190	874	295	208	3.4	WQB			No	76W0486
39			7.5				1630	142		Unknown		331KBBY	No	65M0043
41			7.4			14620	1510	290	50.4	Unknown		331CRLS	No	65M0044
42			7.5			29920	4150	170	64.2	Unknown		331KBBY	No	65M0045
45			8.0				15	1710		Unknown		217DKOT	No	52M0002
46			6.9				1480	459		Unknown		320AMSD	No	52M0003
50			7.4			13720	1090	400	57.9	Unknown		331KBBY	No	65M0042
52	.01		9.57		4600	3802	1090	531	10.5	WQB			No	75W1761
54	.22		7.79		2094		372	302	7.9	WQB			No	76W0485
59	.05		8.07		2445		585	321	6.6	WQB			No	76W0484
61			8.2				100	1700		Unknown		217MDDY	No	69M0003
62	.02		9.56		8030	5312	1490	334	13.0	WQB			No	75W1763
63			8.0				78	1820		Unknown		217MDDY	No	69M0002
64			8.3				1080	262		Unknown		331CRLS	No	52M0004
65	.16		8.8	23	3639	2727	500	388	14.2	WQB			Yes	76W1070
70	34		7.6		3704	3189	2310	470	1.4	WQB	20		No	76W2847
71	.02	.09	7.9	16	2733	2182	1450	293	1.6	WQB			Yes	76W1064
72	.08	.09	8.1	19	7390	6401	2170	640	11.4	WQB			Yes	76W1063
73	.04		8.52		5260	4299	1050	467	12.6	WQB			No	75W2111
74	.05	.10	7.95	19	1827	1262	395	247	8.0	WQB			Yes	76W1062
78	.03	.08	8.1	23	4489	3351	900	450	11.2	WQB			Yes	76W1069
81	.04	.06	8.3	19	8220	7152	1920	313	15.5	WQB			Yes	76W1068
82	.08	.12	7.7	10	1116	726	415	191	1.6	WQB			Yes	76W1061
85			5.5				35300	120		Unknown		331MDSN	No	63M0011
90	2.1		8.12		1300	1072	450	423	2.6	WQB			No	75W2107
91	.17		8.18		1468	1217	452	440	3.6	WQB			No	75W2108
92	.04	.09	7.5	19	1205	806	525	180	1.0	WQB			Yes	76W1065
93	.04	.11	7.8	19	1391	964	732	243	.8	WQB			Yes	76W1066
96	.07	.15	8.5	22	8210	7117	1160	490	24.8	WQB			Yes	76W1067
99	1.7		7.93		1228	1009	505	383	1.6	WQB			No	75W2106
100	.68		7.98		1386	1202	573	568	1.9	WQB			No	75W2104
101	1.1		8.07		1353	1124	486	442	2.5	WQB			No	75W2103
109	.27	.24	7.9	16	355	207	98	89	1.5	WQB			Yes	76W1060

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
113	19N	57E	26	CCC	06	15	76	Creek	68	104	298	11	1.7	.06		576	5	7.5	725
121	16N	59E	25	BD	09	03	75	Spring	744	454	97	17.3				721		33	3220
126	25N	51E	09		07	27	76	River	52	63	429	8.5	<.05			503	12	14	863
127	20N	49E	20		07	27	76	River	79	114	657	9.6	<.01			565	11	13	1530
128	20N	49E	20		07	28	76	River	85	127	579	9.8	<.01			521	34	13	1484
129	25N	51E	24		07	27	76	River	55	83	834	10	<.01			796	15	11	1510
130	25N	51E	24		07	28	76	River	52	96	880	10	.06			779	29	10	1692
131	25N	51E	09		07	28	76	River	53	67	456	8.7	.02			528	13	14	898
132	23N	50E	18	BCD	05	16	52	Well	1800	280	46000*					280		72000	4200

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters (Con't.)

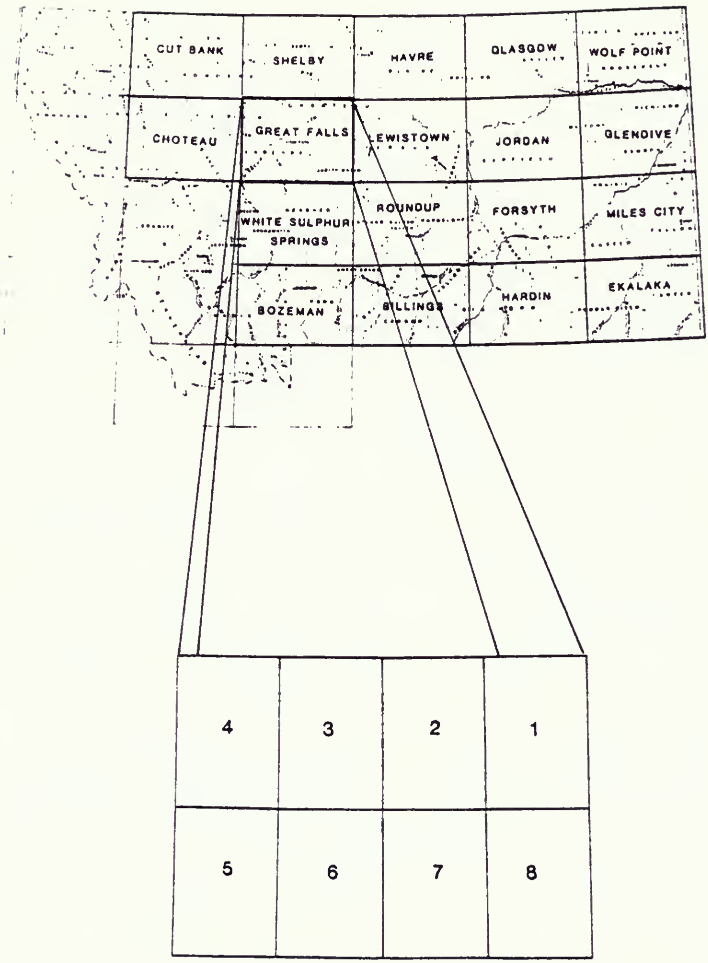
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
113	.06	.38	8.3	18	2146	1503	600	480	5.3	WQB			Yes	76W1059
121	.02		7.73		4820	5286	3720	591	.7	WQB			No	75W1764
126	.08		8.4	20.5	2328	1689	388	432	9.5	EPA			Yes	76W1713
127	.01		8.34	20	3550	2693	667	481	11.1	EPA			Yes	76W1716
128	.01		8.87	23	3660	2589	736	484	9.3	EPA			Yes	76W1722
129	.01		8.48	22	3975	2909	478	677	16.8	EPA			Yes	76W1717
130	.01		8.53	24	4038	3153	525	688	16.7	EPA			Yes	76W1723
131	.02		8.46	20.5	2426	1170	410	455	9.8	EPA			Yes	76W1719
132			8.5				5650	230		Unknown		337MSNC	No	52M0005

GLENDIVE 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
1	23N 51E 26					.3									<1				<.01	76W1714
2	22N 50E 29					.3									<1				<.01	76W1715
66	26N 54E 36 BAA			9	<10	.27	012	<.05	.01	<.05	.06	<.2	.06		4				.08	76W1070
71	25N 58E 31 DDD			2	<10	.24	.005	<.05	.01	.05	.07	<.2	<.05		<1				01	76W1064
72	25N 58E 32 DDD			9	<10	.26	.024	.05	.03	<.05	.08	<.2	.13		<1				.12	76W1063
74	25N 59E 31 CCD			7	<10	.095	.005	<.05	.05	<.05	.03	.2	<.05		<1				<.01	76W1062
78	24N 53E 25 BBB			3	<10	.36	.014	<.05	<.01	<.05	.06	<.2	.08		3				<.01	76W1069
81	24N 53E 36 CC			2	<10	1.1	.028	.05	.03	<.05	.09	<.2	.13		3				<.01	76W1068
82	24N 58E 16 DDB			3	<10	.125	<.001	<.05	.01	<.05	.03	.2	<.05		1				<.01	76W1061
82	23N 57E 01 DDD			3	<10	.26	.001	<.05	<.01	<.05	.05	<.2	<.05		<1				<.01	76W1065
93	23N 57E 09 DDD			3	<10	.085	<.001	<.05	<.01	<.05	.04	<.2	<.05		2				<.01	76W1066
88	23N 53E 38 BBC			8	<10	.375	.026	<.05	.02	<.05	.06	<.2	.11		2				<.01	76W1067
109	20N 58E 29 ADD			3	<10	.12		.05	.05	.08	.05	.4	.06		<1				.12	76W1060
113	18N 57E 28 CCC			3	<10	.36		<.05	.01	<.05	.05	.2	<.05		<1				.02	76W1059
126	25N 61E 09					.3									<1				<.01	76W1713
127	20N 49E 20					.5									<1				<.01	76W1716
128	20N 49E 20					.4									<1				<.01	76W1722
129	25N 51E 24					.4									<1				<.01	76W1717
130	25N 51E 24					.4									<1				<.01	76W1723
131	26N 61E 08					.2									<1				<.01	76W1719

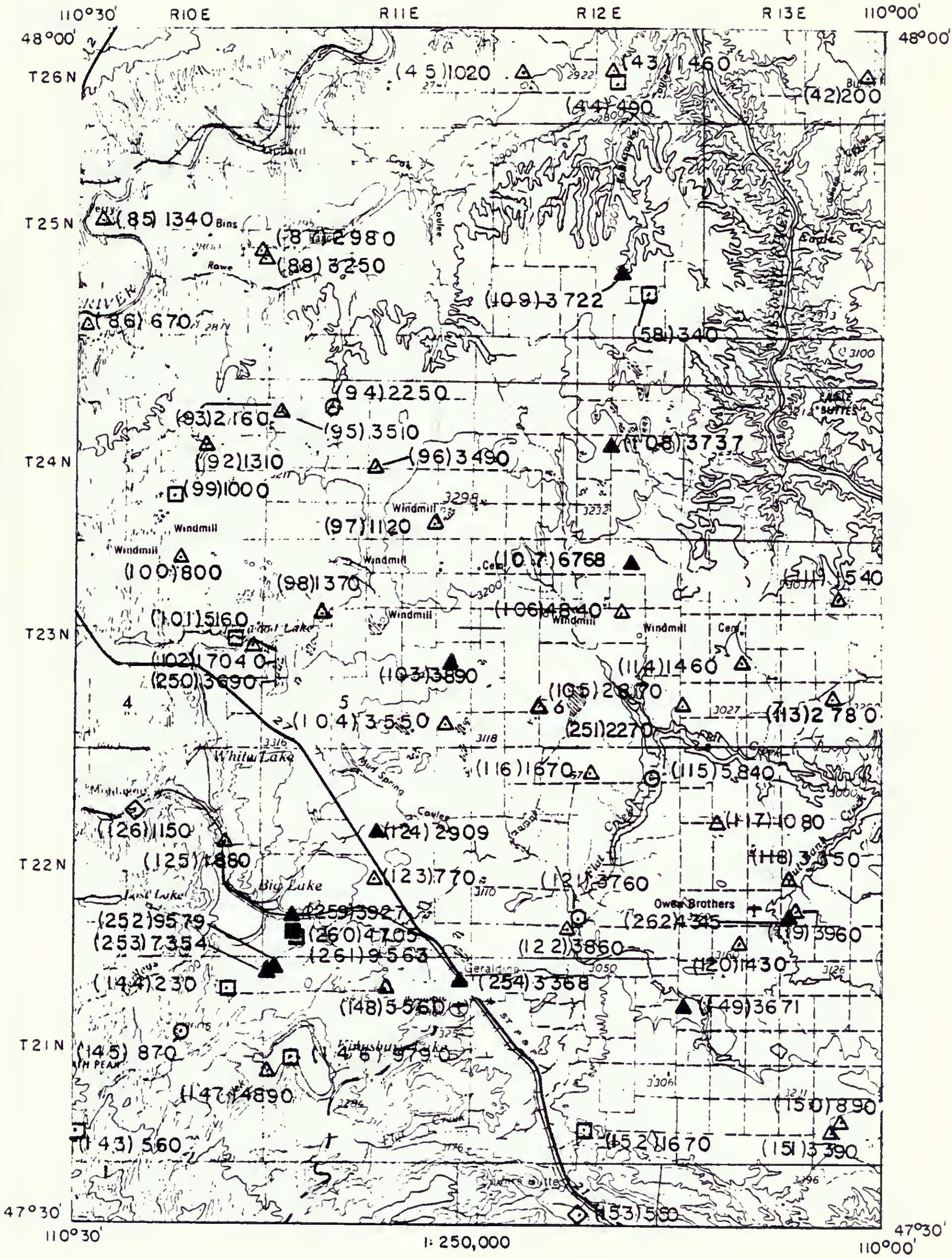
LOCATION BASE MAP



GREAT FALLS 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 1



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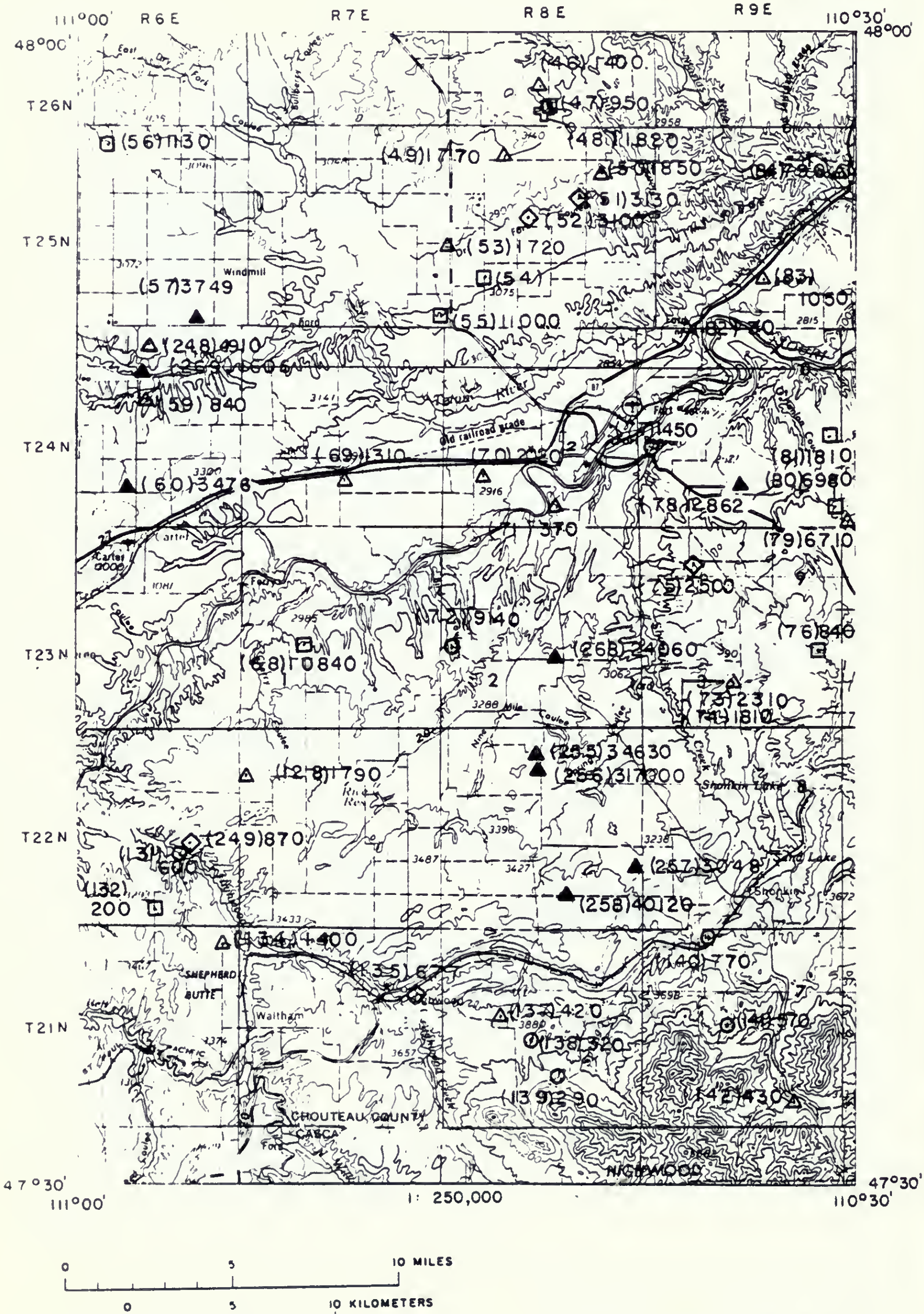
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

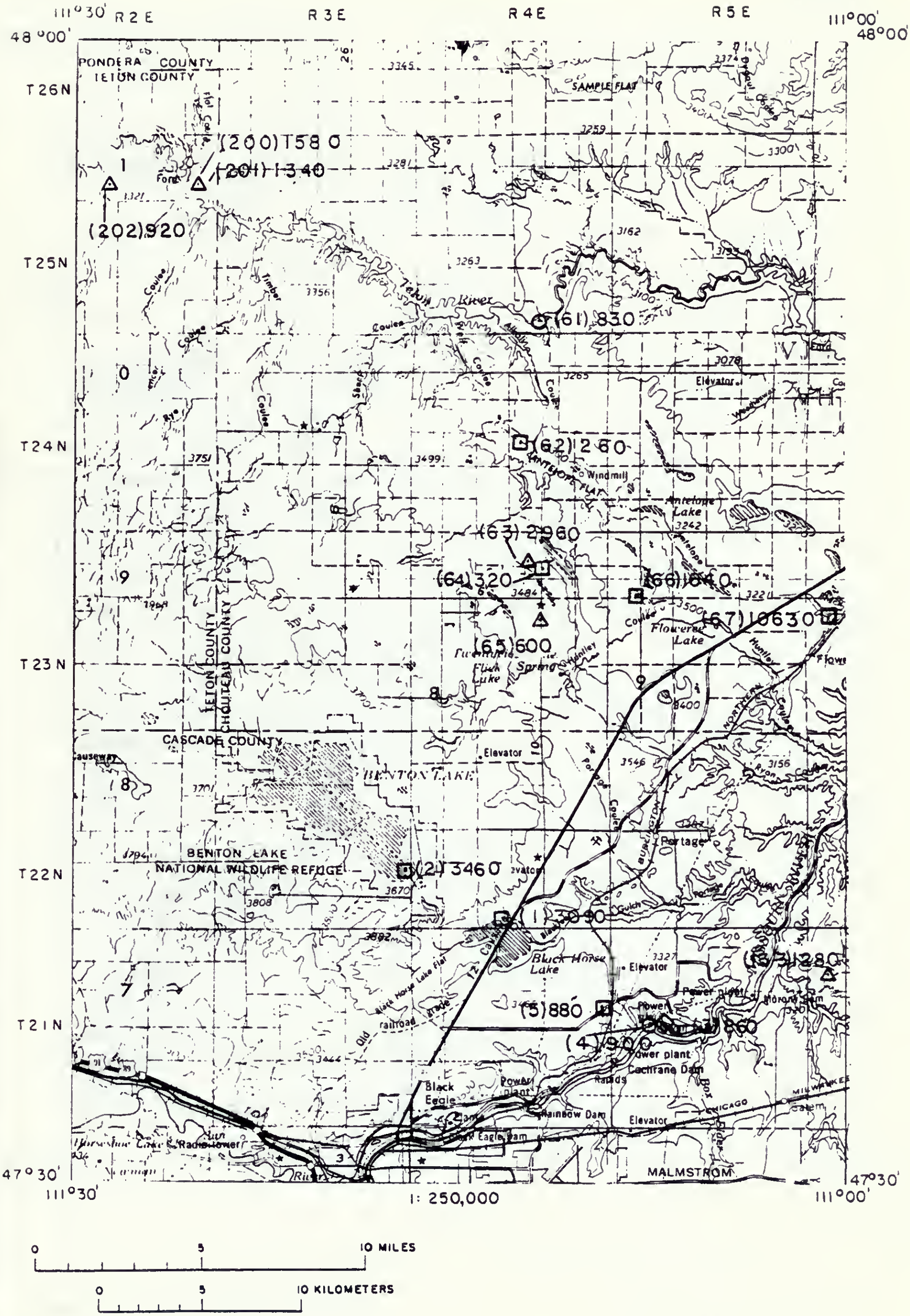
SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 2



SPECIFIC CONOUCTANCE SURVEY

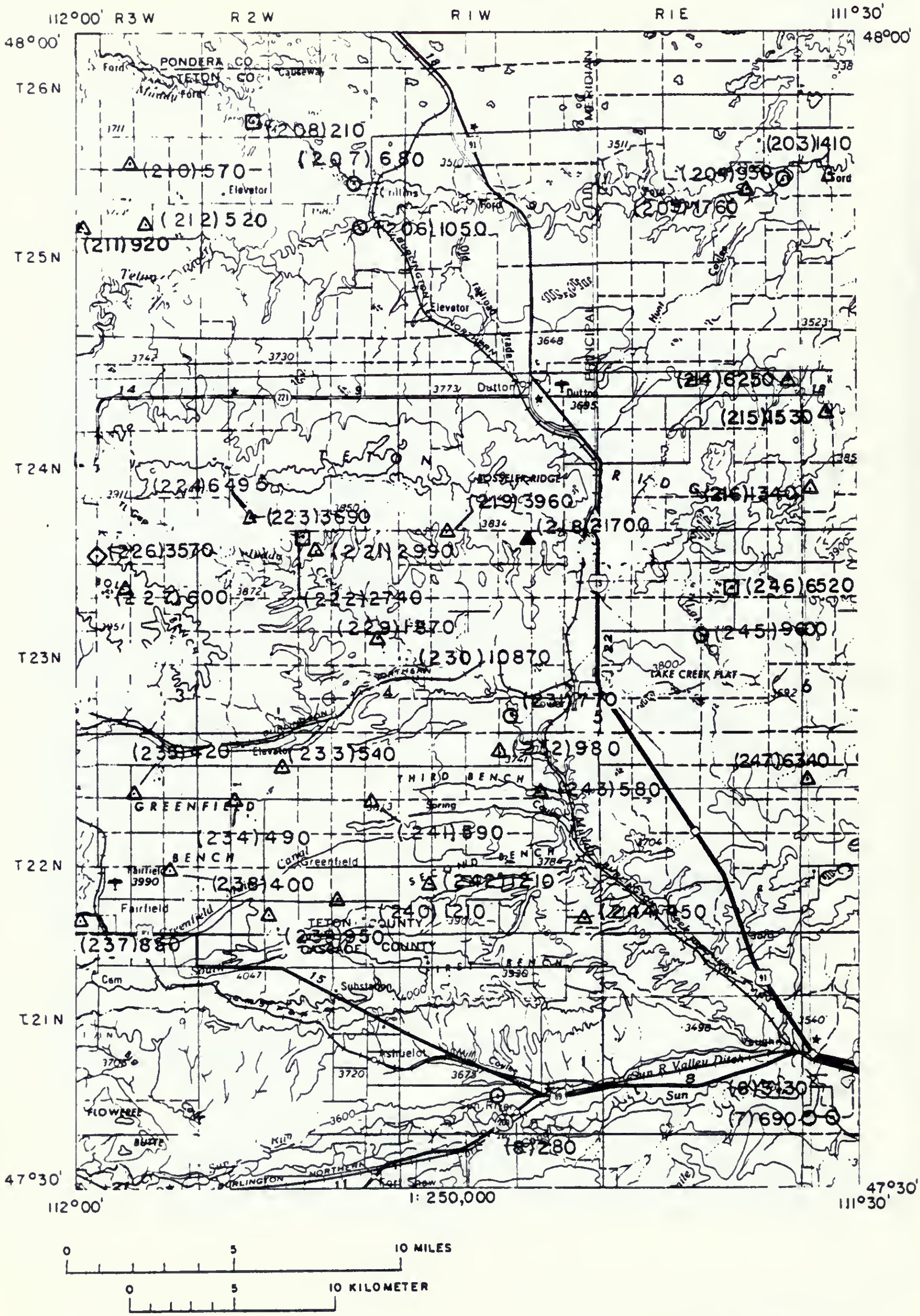
GREAT FALLS 3



CONTOUR INTERVAL 100 FT

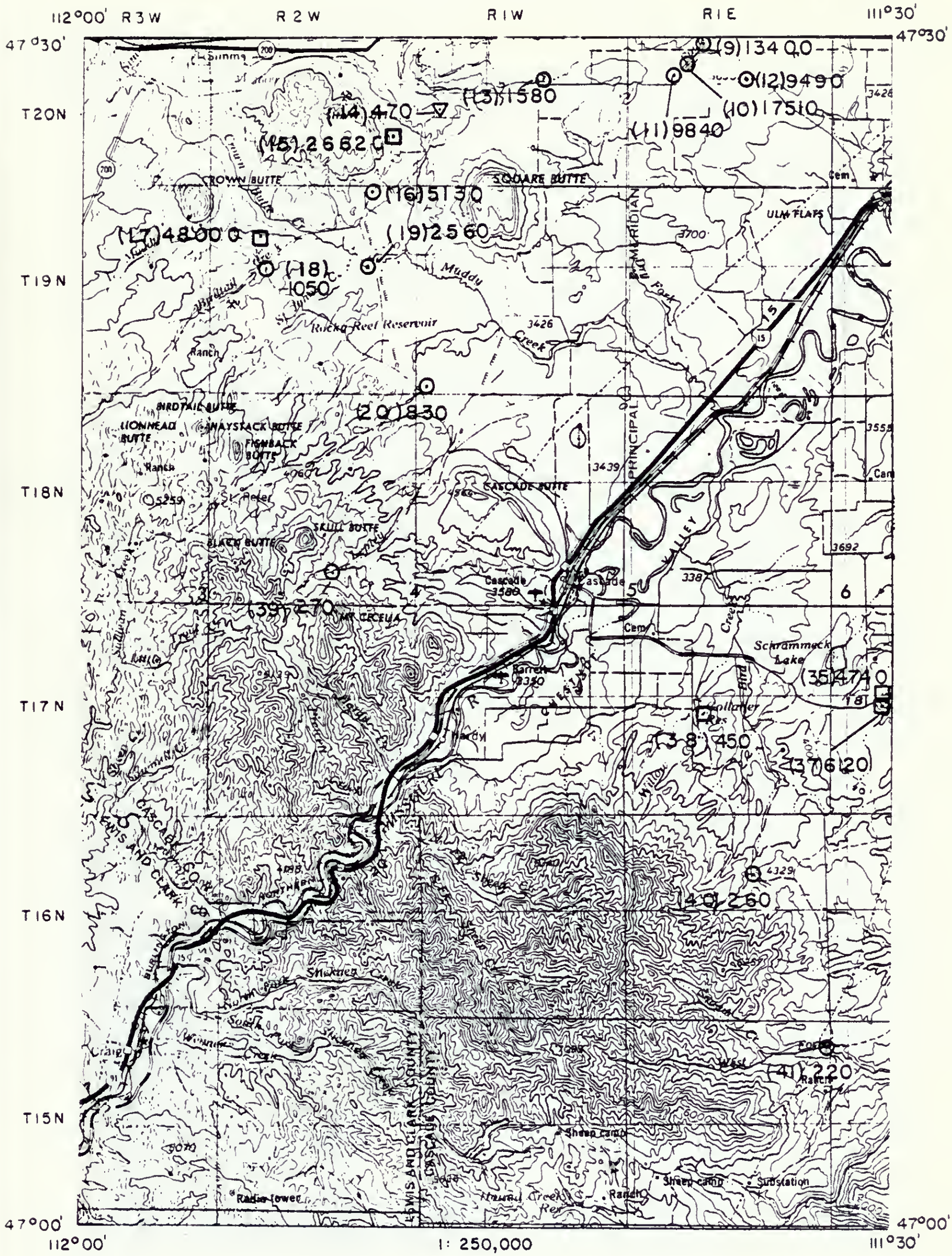
SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 4



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



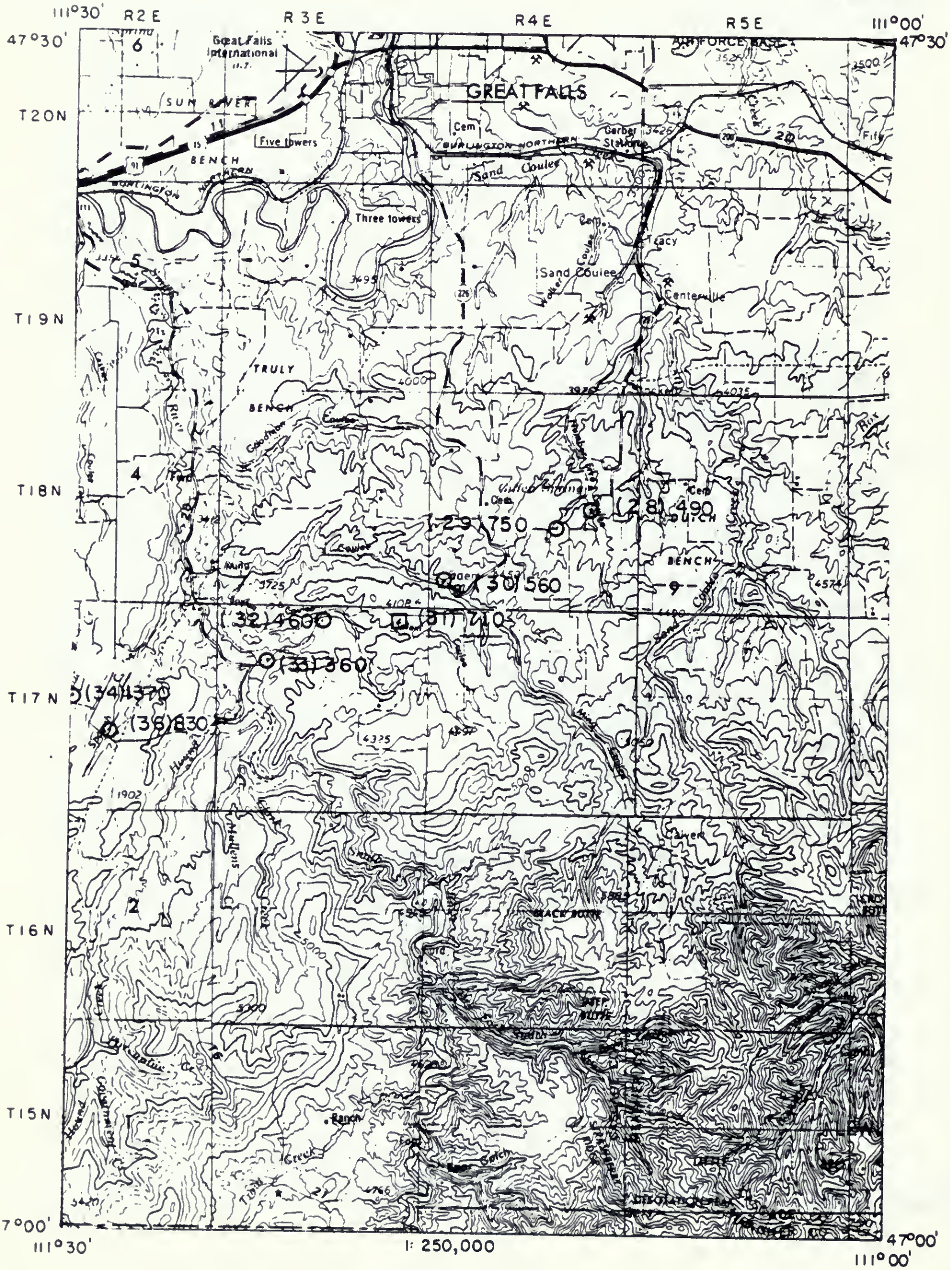
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 6



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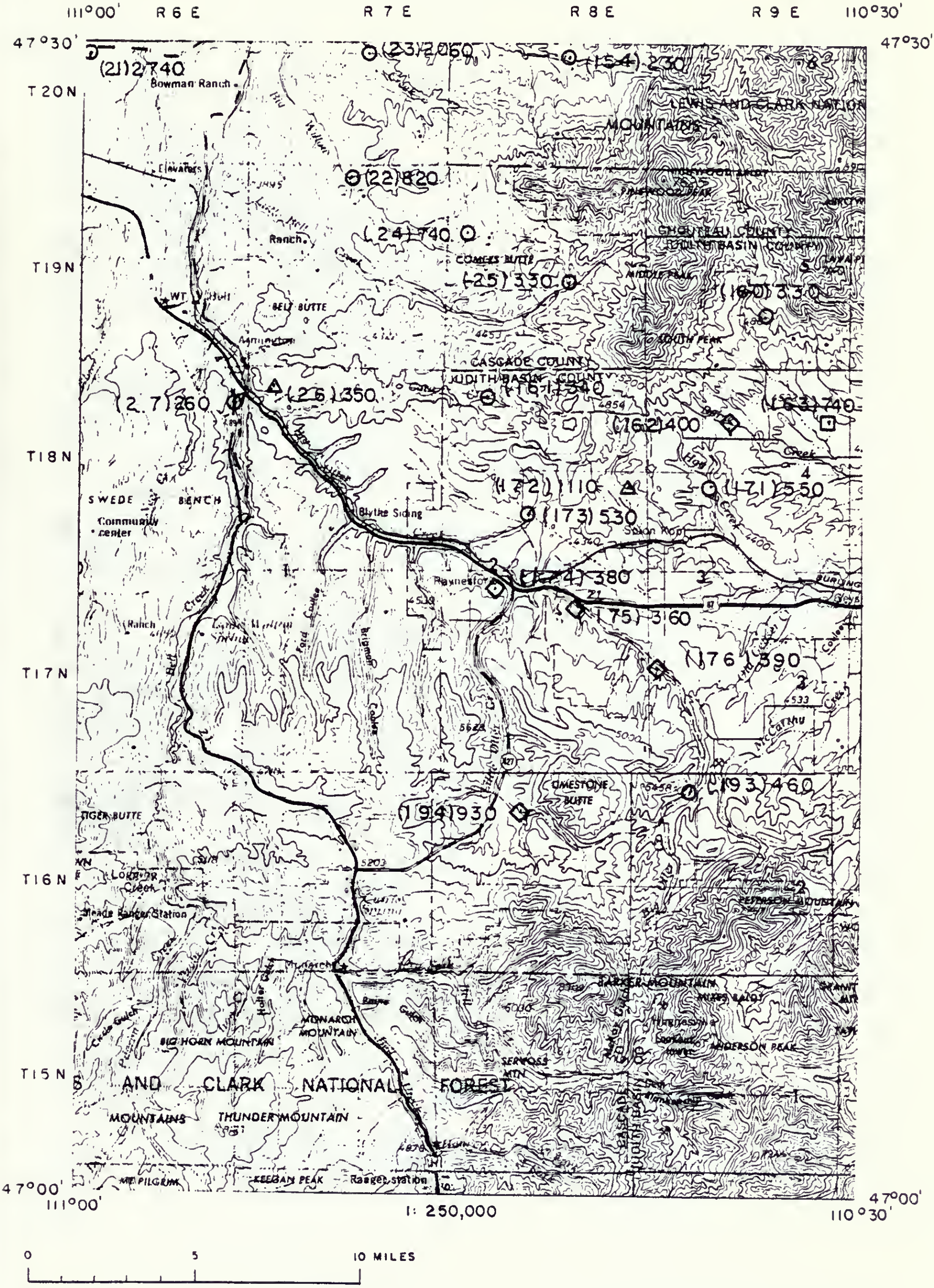
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 7



1: 250,000

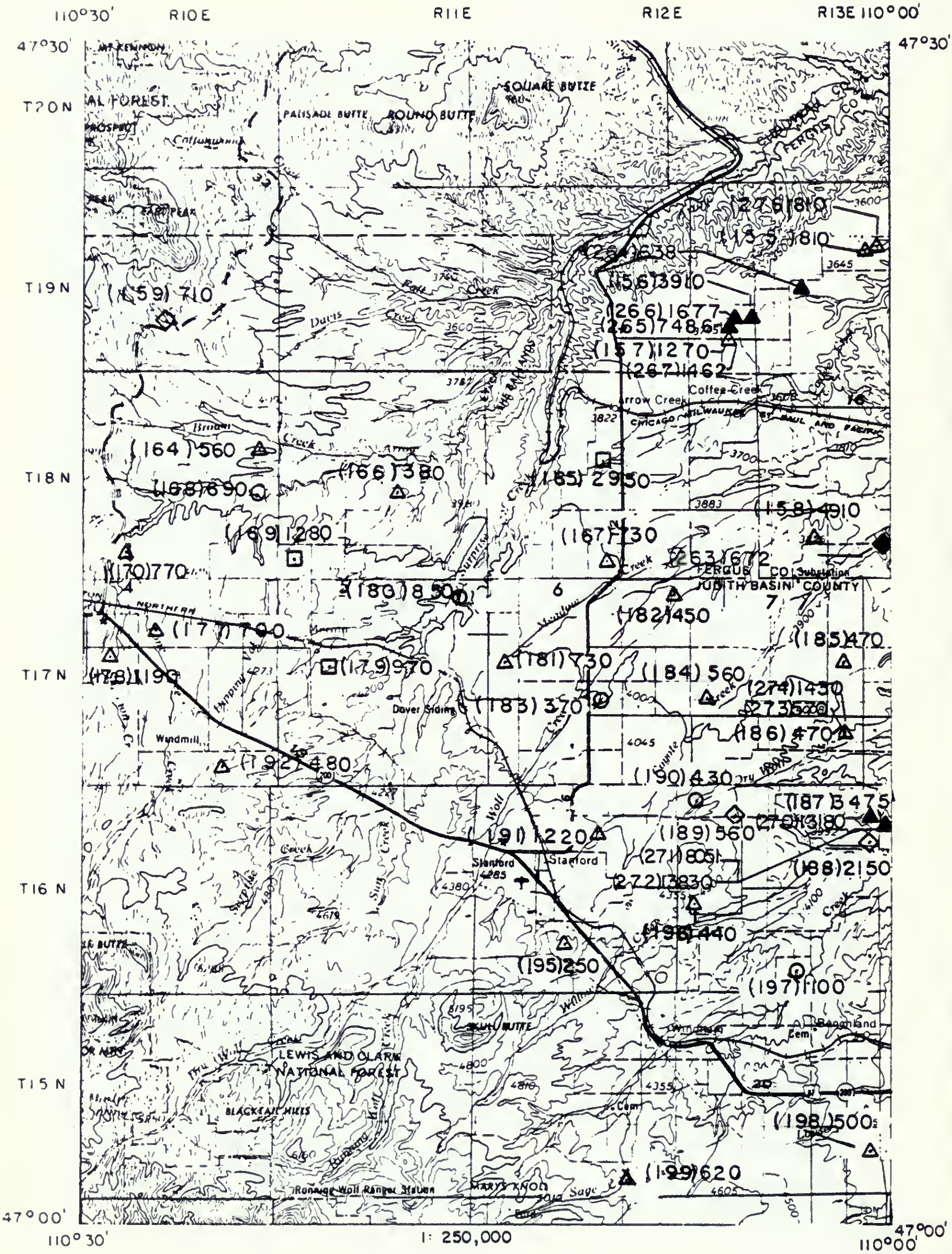
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

GREAT FALLS 8



0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

GREAT FALLS 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map rel no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG17	Cascade	22N 04E 33 DDDD	08 26 76	Lake		Black Horse Lake	3090	14	no	3410				
2	MBMG16	Cascade	22N 03E 25 ADA	08 26 76	Lake		Benton Lake, shallow with much vegetation	3460	14.8	no	3620				
3	MBMG20	Cascade	21N 05E 17 DCC	08 26 76	Spring			860	16.8	no	3020				Montana Power
4	MBMG19	Cascade	21N 05E 17 CD	08 26 76	River		Water is from drinking fountain at Montana Power Park	900	14.9	no	2930				
5	MBMG18	Cascade	21N 04E 13 ADC	08 26 76	Reservoir		Small reservoir with much vegetation	880	17.1	no	3304				
6	MBMG2	Cascade	21N 02E 31 ADC	08 27 76	Creek	1 5 cfs		3130	9.8	no	3620				
7	MBMG3	Cascade	21N 02E 31 CB	08 27 78	Creek	30 cfs		690	9	no	3680				
8	MBMG1	Cascade	21N 01W 28 DA	08 27 76	Creek	25 cfs	Small creek formed by irrigation runoff	280	11.8	no	3490				
9	MBMG4	Cascade	20N 01E 09 CDC	08 27 76	Creek		Four Mile Creek	13400	10	no	3360				
10	MBMG5	Cascade	20N 01E 17 ADA	08 27 76	Creek		Four Mile Creek, alkali deposits on either side	17510	9.5	no	3580				
11	MBMG6	Cascade	20N 01E 17 CDD	08 27 76	Creek		Four Mile near source	9840	8.8	no	3680				
12	MBMG8	Cascade	20N 01E 15 DCC	08 27 76	Creek		Unnamed creek	9490	11	no	3640				
13	MBMG7	Cascade	20N01W 15 DCC	08 27 76	Creek		Small creek on N side of road	1680	10.2	no	3540				
14	MBMG9	Cascade	20N 01W 19 DB	08 27 76	Canal	5 cfs	Irrigation canal	470	8.2	no	3530				
15	MBMG10	Cascade	20N 02W 25 CA	08 27 76	Pond		Small pond about 10 feet in diameter, algal sample taken	26620	11.9	no	3690				
16	MBMG11	Cascade	19N 02W 02 A	08 27 78	Creek		Small creek	6130	10.4	no	3530				
17	MBMG12	Cascade	19N 02W 08	08 25 78	Reservoir		Reservoir on Muddy Creek, algal sample taken	48000	27	no	3560				
18	MBMG13	Cascade	19N 02W 17 AC	08 26 76	Creek	0.8 cfs	Birdtail Creek	1050	18	no	3660				
19	MBMG14	Cascade	19N 02W 14 AC	08 27 76	Creek	6 cfs	Little Muddy Creek below junction with St John Creek	2560	12	no	3500				
20	MBMG15	Cascade	19N 01W 31 CC	08 26 76	Creek	0.2 cfs	Small creek	830	23	no	3470				
21	MBMG21	Cascade	20N 06E 17 CBA	08 28 76	Creek	30 gpm	Roger Coulee Creek, alkali present	2740	18.8	no	3440				
22	MBMG23	Cascade	19N 07E 03 BDC	08 28 78	Creek	50 gpm	Middle Willow Creek	820	16.2	no	3620				
23	MBMG22	Cascade	20N 07E 15 ACC	08 26 78	Creek	10 gpm	Small, clear creek	2060	14	no					
24	MBMG25	Cascade	18N 08E 18 ABB	08 28 78	Creek	0.5 cfs	Small, slow-flowing creek	740	14.9	no	4100				
25	MBMG26	Cascade	19N 08E 22 ACC	08 28 76	Creek	3 cfs	Little Belt Creek	330	14.5	no					
26	MBMG27	Cascade	18N 07E 06 DA	08 25 78	Well	0.5 gpm	Located at highway rest area	350	12.8	no	3610				Montana Highway Department
27	MBMG24	Cascade	18N 06E 01 DDC	08 26 78	Creek	300 cfs	Belt Creek	260	17	no	3690				
28	MBMG28	Cascade	18N 04E 23 ACCC	08 25 76	Creek	2 gpm	Number Five Coulee Creek	490	15	no	3920				
29	MBMG29	Cascade	18N 04E 22 DBC	08 25 78	Creek	2 gpm	Griffen Coulee	750	15	no	4000				
30	MBMG30	Cascade	18N 04E 31 BDB	08 25 78	Creek	8 gpm	Ming Coulee Creek	560	15	no	3800				

GREAT FALLS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	MBMG39	Cascade	17N 03E 01 BC	08	25	76	Reservoir		Small reservoir in Boston Coulee, much vegetation	710	17	no	4040				
32	MBMG38	Cascade	17N 03E 04 AD	08	25	76	Creek	28 cfs	Boston Coulee Creek	460	15	no	3740				
33	MBMG37	Cascade	17N 03E 08 CA	08	75	76	River	420 cfs	Smith River	360	18	no	3450				
34	MBMG35	Cascade	17N 02E 17 DC	08	25	76	Creek		Flat Creek	1370	16	no	3380				
35	MBMG33	Cascade	17N 02E 17 CD	08	25	76	Reservoir		Small reservoir fed by coulee lined with salts	4740	24	no	3780				
36	MBMG36	Cascade	17N 02E 21 DDB	08	25	76	Creek	80 gpm	Spanish Coulee Creek	830	17	no	3720				
37	MBMG34	Cascade	17N 02E 17 CD	08	25	76	Reservoir		Algal sample taken	6120	24	no	3780				
38	MBMG32	Cascade	17N 01E 21 BB	08	28	76	Reservoir			450	21	no	3570				
39	MBMG31	Cascade	18N 02W 34 ABBB	08	25	76	Creek	0.4 cfs	Lepley Creek	270	21	no	4260				
40	MBMG40	Cascade	16N 01E 10 D	08	25	76	Creek	3 cfs	Bird Creek	260	21	no	4050				
41	MBMG41	Cascade	15N 01E 01 D	08	25	76	Creek	0.8 cfs	West Fork Hound Creek	220	19	no	4160				
42	MBMG41	Chouteau	26N 13E 26 DBDD			76	Pond		In a wheat field	200	18	no	2980				
43	MBMG43	Chouteau	26N 12E 27 CABD			76	Well		Domestic and stock use	1460	18	no	2860	15	20		Fultz
44	MBMG44	Chouteau	26N 12E 27 CACA			76	Reservoir		Stock use	490	21	no	2850				Fultz
45	MBMG45	Chouteau	26N 12E 30 DAAA			76	Well	2 gpm	Domestic use	1020	19	no	2770	6			Watson & Lean
46	MBMG55	Chouteau	26N 08E 28 CDDD			76	Well			1400	10.2	no	3010		25		Swensgard
47	MBMG56	Chouteau	26N 08E 33 ADDB			76	Reservoir			950	22.3	no	3010				Swensgard
48	MBMG57	Chouteau	26N 08E 33 ADDB			76	Seep			1820	27	no	2990				
49	MBMG58	Chouteau	25N 08E 05 CCDB			76	Well	6 gpm	Stock use	1770	11.2	no	2940				Anderson
50	MBMG59	Chouteau	25N 08E 11 BAC			76	Well	3 gpm (E)	Stock use	1850	23.9	no	2880		35		
51	MBMG60	Chouteau	25N 08E 15 ABCB			76	Spring	10 gpm (E)		3130	14.9	no	2780				Lenington
52	MBMG61	Chouteau	25N 08E 16 CCAA			76	Spring			3100	23.6	no	2840				Lenington
53	MBMG10	Chouteau	25N 07E 24 DADD			76	Well		Water is hard, saline seeps on farm	1720	18.4	no	2900	48	50		Meeks
54	MBMG62	Chouteau	25N 08E 30 ADAC			76	Reservoir		Unused			no	2700				Allen
55	MBMG12	Chouteau	25N 07E 38 DDBA			76	Reservoir		Reservoir contains much algae	11000	20.5	no	3040				Meeks
56	MBMG9	Chouteau	25N 06E 05 DDAB			76	Reservoir		Reservoir contains much algae	1130	19	no	3170				
57	MBMG11	Chouteau	25N 08E 35 DCCA	01	14	77	Well		Stock use	3749	9	yes	3010	75	185	211CLRD	Baack
58	MBMG46	Chouteau	26N 12E 26 DDDC			76	Pond		Contains much vegetation	340	22.5	no	3130				
59	MBMG88	Chouteau	24N 06E 15 BBBB			76	Pond		Contains much vegetation	840	24	no	2950				
60	MBMG87	Chouteau	24N 06E 28 DCCD	01	14	77	Well	35 gpm	Domestic, stock, and lawn watering use	3476	12	yes	3170		1818	217KOTN	Fishbaugh

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61	MBMG13	Chouteau	25N 04E 34 DADC	76	River	180 cfs	Teton River	830	15.6	no	3060				
62	MBMG84	Chouteau	24N 04E 22 BAC	76	Reservoir		Contains much algae	260	7.5	no	3290				Leeper
63	MBMG89	Chouteau	23N 04E 03 DDDC	76	Ditch			2960	10	no	3440				Good
64	MBMG90	Chouteau	23N 04E 03 DDDB	76	Reservoir			320	12	no	3440				Good
65	MBMG91	Chouteau	23N 04E 15 DDDA	76	Well		Water is not used for drinking	600	8.9	no	3520		16		Huffman
66	MBMG92	Chouteau	23N 06E 07 DDDD	76	Pond		About 100 yards long by 25 yards wide	1040	8	no	3420				
67	MBMG93	Chouteau	23N 06E 18 ACBC	76	Reservoir		Algal sample taken	10630	13.9	no	2900				Crawford
68	MBMG94	Chouteau	23N 07E 20 DAD	76	Reservoir		Originally a stock reservoir, now is unused	10840	20	no	3070				Highfill, Tony
69	MBMG88	Chouteau	24N 07E 27 CBBB	76	Well			1310		no	2960				Olsen
70	MBMG102	Chouteau	24N 08E 29 BBCC	76	Well	15 gpm	Domestic use except for drinking	2020	11.8	no	2900	125	185		Cline
71	MBMG103	Chouteau	24N 08E 34 BADC	76	Well		Domestic use	370	17	no	2930		18		Gierke, E.
72	MBMG120	Chouteau	23N 08E 19 CACA	76	Creek		Bird Coulee	8140	16	no	3460				
73	MBMG123	Chouteau	23N 09E 28 DADB	76	Well	20 gpm	Stock use	2310	16	no	3270		130		Kelly, John
74	MBMG124	Chouteau	23N 09E 28 DADB	76	Well	0.3 gpm	Domestic use	1810	13.6	no	3270		30		Kelly, John
75	MBMG121	Chouteau	23N 09E 08 ABBC	76	Spring		Domestic use except for drinking	2500	23	no	3100				Hankins, J.
76	MBMG122	Chouteau	23N 09E 24 DBCB	76	Reservoir		Stock reservoir	840	21	no	3410				
77	MBMG104	Chouteau	24N 09E 19 CDBC	76	Creek	16 cfs	Shonkin Creek	1460	20	no	2710				
78	MBMG105	Chouteau	24N 09E 28 DDAA	01 16 77	Well	8 gpm (E)	Stock use	2862	16	yes	2980	flowing	2022	221SWFT	Striet
79	MBMG108	Chouteau	24N 10E 31 CCCC	76	Well		Well is abandoned, water has a sulphur smell	6710	12	no	3200	8	10		Ackerson
80	MBMG107	Chouteau	24N 09E 36 DABD	76	Reservoir		About 8 acres in size	6980	18	no	3160				Ackerson
81	MBMG106	Chouteau	24N 09E 24 ABAC	76	Reservoir		Stock reservoir	1810	22	no	2940				
82	MBMG54	Chouteau	25N 09E 31 DDDD	78	Well		Domestic use	30	19	no	2600				
83	MBMG53	Chouteau	26N 09E 27 BCCC	76	Well			1060	14.8	no	2650	40	60		Olson
84	MBMG63	Chouteau	26N 08E 12 BDAA	78	Well		Well is located .25 mile N of house	790	16	no	2580	8	25		Wood
85	MBMG51	Chouteau	26N 10E 18 CADA	76	Well		Domestic use	1340	12	no	2560		28		
86	MBMG52	Chouteau	25N 10E 31 CCDB	78	Well	3 gpm	Domestic use	670	20	no	2820		28		Crawford
87	MBMG49	Chouteau	25N 10E 24 CDBD	78	Well		Unused	2980	19	no	2810	18	26		MacDonald
88	MBMG50	Chouteau	25N 10E 24 CDBA	76	Well	60 gpm	Stock and domestic use (except for drinking)	3260	22	no	2810		1208		MacDonald
89	not on map														
90	not on map														

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91	not on map														
92	MBMG112	Chouteau	24N 10E 23 BBB	76	Well		Domestic use	1310	15	no	3300		160		Nagengast
93	MBMG114	Chouteau	24N 11E 1B BCDD	78	Well		Domestic use	2160	13	no	3180	90	204		MacFarland, W D
94	MBMG118	Chouteau	24N 11E 17 AADA	78	Creek			2250	20	no	3020				MacFarland, W D
95	MBMG11S	Chouteau	24N 11E 1B BCDD	76	Well		Stock use	3510	11	no	3180		203		MacFarland, W D
96	MBMG117	Chouteau	24N 11E 22 DCCD	76	Well		Domestic use except for drinking	2490	15	no	3200	144	150		Fultz, Basil
97	MBMG118	Chouteau	24N 11E 35 DADD	76	Well	25 gpm	Domestic use	1120	15	no	3250	55	115		Cameron
98	MBMG129	Chouteau	23N 11E 17 ABAC	76	Well	8 gpm	Domestic use	1370	16	no	3230		120		Pointdexter
99	MBMG113	Chouteau	24N 10E 27 CBB	76	Reservoir		Wildlife reservoir	1000	20	no	3300				
100	MBMG125	Chouteau	23N 10E 03 BCB	76	Well		Domestic use	800	14	no	3350		140		Hampton, Wayne
101	MBMG127	Chouteau	23N 10E 13 BBDD	76	Lake		Harwood Lake	6160	21.5	no	3210				Chaney, H. W
102	MBMG128	Chouteau	23N 10E 13 CDDB	78	Well		Used for watering lawn	17040	19	no	3210	6	12		Chaney, H W
103	MBMG130	Chouteau	23N 11E 24 CDDA	01 16 77	Well	3 gpm (E)	Domestic use except for drinking	3890	12	yes	3160	75	135	211CLRD	Farmer, Bob
104	MBMG131	Chouteau	23N 11E 36 BCBC	76	Well		Domestic use except for drinking	3550	15	no	3120		90		Anderson
105	MBMG132	Chouteau	23N 12E 29 DDAB	76	Well		Domestic use, water is corrosive	2870	14	no	3110	40	105		Schlemmer, B
106	MBMG134	Chouteau	23N 12E 14 BABB	78	Well		Domestic use except for drinking	4840	13	no	3060		225		Rosenburg
107	MBMG133	Chouteau	23N 12E 02 CDDA	01 15 77	Well	3 gpm	Stock and domestic use (except for drinking)	6768	6	yes	3120	120	184	211EGLE	Corder
108	MBMG119	Chouteau	24N 12E 22 AAAD	01 15 77	Well	2.5 gpm	Domestic use except for drinking	3737	20	yes	3220	50	481		Clark
109	MBMG47	Chouteau	25N 12E 27 ABCB	01 16 77	Well	8 gpm	Stock and domestic use (except for drinking)	3722	14	yes	3070	190	302		Trunk, Andrew
110	not on map														
111	MBMG182	Chouteau	23N 13E 11 DBBB	76	Well		Domestic and stock use	1540	12	no	3020	20	60		Ludeman
112	not on map														
213	MBMG165	Chouteau	23N 13E 28	76	Well		Domestic use except for cooking and drinking	2780	11.6	no	3130	38	38		Judeman
114	MBMG163	Chouteau	23N 13E 20 DADC	76	Well		Stock use	1460	18	no	3140		2800		Judeman
115	MBMG140	Chouteau.	22N 12E 01 CCDC	76	Creek		Flat Creek, salts along edges	6840	20	no	2980				
116	MBMG141	Chouteau	22N 12E 03 CDCA	76	Well		Domestic and stock use	1670	17	no	3160		110		Fairbanks
117	MBMG170	Chouteau	22N 13E 17 BBBC	76	Well		Domestic use	1080	19	no	3050				Wishman
118	MBMG171	Chouteau	22N 13E 22 CCB	76	Well		Domestic use	2350	12	no	3060		110		Rowland
119	MBMG172	Chouteau	22N 13E 27 CCDA	76	Well		Domestic use except for drinking	3960	12	no	3040		45		Clark, Tom
120	MBMG173	Chouteau	22N 13E 32 DBDA	76	Well		Domestic use	1430	18	no	3100		2160		Owen, L.

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121	MBMG142	Chouteau	22N 12E 27 CCCC	75	Creek		Flat Creek, contains much vegetation	3750	23	no	3000				
122	MBMG143	Chouteau	22N 12E 33 AAAC	75	Well		Stock use	3860	13	no	3060	20			
123	MBMG139	Chouteau	22N 11E 22 CCCC	76	Well		Domestic and stock use, water has a sulphur smell	770	20	no	3190		1918		Blyth, Fred
124	MBMG138	Chouteau	22N 11E 15 BCCB	01 15 77	Well		Stock and domestic use (except for drinking)	2909	6	yes	3130	26	70	211CLRD	Myers
125	MBMG137	Chouteau	22N 10E 14 DDBB	75	Well		Domestic and stock use	1880	12	no	3180	6	18		Tade, Vick
126	MBMG136	Chouteau	22N 10E 09 CCCA	76	Spring		Domestic and stock use	1150	23	no	3180				Patterson, William
127	not on map														
128	MBMG95	Chouteau	22N 07E 07 BCCA	75	Well		Domestic and stock use	1790	14	no	3310	1251	1311		Katzenberger
129	not on map														
130	not on map														
131	MBMG97	Chouteau	22N 06E 23 CDCA	76	Creek	3 cfs	Highwood Creek	600	20	no	2930				
132	MBMG99	Chouteau	22N 06E 34 DBBC	76	Reservoir		Stock reservoir	200	21	no	3360				Rettig
133	MBMG101	Chouteau	21N 06E 07 ACAB	78	Well		Domestic and stock use	1280	15	no	3240	450	750		Forder
134	MBMG100	Chouteau	21N 06E 01 ACDB	78	Well		Domestic use except for drinking	1400	15	no	3320	4			
135	76M1642	Chouteau	21N 07E 13 BAAA	02 18 77	Spring	200 gpm (E)		677	6.2	yes	3680				
136	not on map														
137	MBMG144	Chouteau	21N 08E 17 DBB	76	Well		Domestic use	420	15	no	3400	10	17		Geay
138	MBMG145	Chouteau	21N 08E 21 ACA	75	Creek	0.5 cfs	Spring Creek, contains much vegetation	320	21	no	3900				
139	MBMG146	Chouteau	21N 08E 27 CAA	76	Creek	1 cfs	Tributory to Spring Creek	290	21	no	4000				
140	MBMG147	Chouteau	21N 09E 05 AAC	76	Creek	0.1 cfs	Say Creek	770	24	no	3350				
141	MBMG148	Chouteau	21N 09E 18 DCC	76	Creek	0.1 cfs	Tributary to West Branch Shonkin Creek	670	18	no	3750				
142	MBMG149	Chouteau	21N 09E 35 ABC	78	Well		Domestic use	430	16	no	4080				Robert, Bill
143	MBMG152	Chouteau	21N 10E 31 BAB	76	Pond			560	17	no	3850				
144	MBMG150	Chouteau	21N 10E 02 DDB	76	Pond			230	18	no	3200				
145	MBMG151	Chouteau	21N 10E 15 ACC	76	Creek		Lepley Creek	870	15	no	3320				Big Sag Cattle Co.
146	MBMG154	Chouteau	21N 11E 18 DDD	78	Lake		Kingsbury Lake; salts along shore	9790	26	no	3200				Big Sag Cattle Co.
147	MBMG155	Chouteau	21N 11E 19 BBCA	78	Well		Stock use	4890	11.5	no	3230				Big Sag Cattle Co.
148	MBMG153	Chouteau	21N 11E 03 DCCC	78	Well		Domestic use except for drinking	5560	13	no	3390		90		Davis, N, G.
149	MBMG177	Chouteau	21N 13E 07 BBBC	01 15 77	Well	30 gpm (E)	Stock and domestic use (except for drinking)	3671	7	yes	3120	8	17	112DRFT	Goldhahn, C.
150	MBMG178	Chouteau	21N 13E 26 DCBA	76	Well		Domestic use	890	17	no	3370		30		Goodhart, J.

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151	MBMG179	Chouteau	21N 13E 26 DCBD	76	Well		Stock use	3390	12	no	3360		80		Goodhart
152	MBMG156	Chouteau	21N 12E 34 BADB	76	Pond		Algal sample taken	1670	20	no	3140				
153	MBMG158	Chouteau	20N 12E 10	76	Spring		Municipal use	550	13	no	3600				
154	MBMG157	Chouteau	20N 08E 15 DBD	78	Creek	35 cfs	Upper Highwood Creek	230	21.5	no	4050				
155	MBMG84	Fergus	19N 13E 12 CD	76	Well		Domestic use	810	17	no		flowing			Vestel, Hush
156	76M1248	Fergus	19N 13E 29 AAA	09 21 78	Well		Unused, test well BR 20 D 61	3910	14	yes		8	24	110TRRC	Brinkman
157	76M1247	Fergus	19N 13E 29 BCBD	09 21 76	Well		Unused, test well BR 11 D 60	1270	16	yes		6	28	110TRRC	Brinkman
158	MBMG62	Fergus	18N 13E 27 DC	76	Well		Water is not used for drinking	4910	13	no		8	16		Lahr, Fred
159	MBMG2	Judith Basin	19N 10E 28	76	Spring		Domestic use	710	14	no	3800				McDonald
160	MBMG1	Judith Basin	19N 09E 27	76	Creek	1.5 cfs	Davis Creek	330	15	no	4880				
161	MBMG3	Judith Basin	18N 08E 05 CD	76	Creek	0.25 cfs	Cora Creek	340	18	no	4700				
162	MBMG4	Judith Basin	18N 09E 09	76	Spring		Domestic use	400	18	no	4520				Skelton
163	MBMG5	Judith Basin	18N 09E 12	76	Reservoir		Stock reservoir	740	12	no	4620				Liland
164	MBMG6	Judith Basin	18N 10E 13	76	Well		Domestic use	660	14.5	no	4000		1100		Backa
165	MBMG21	Judith Basin	18N 12E 15	76	Reservoir			2950	18	no	3800				
166	MBMG20	Judith Basin	18N 11E 22	76	Well	7 gpm	Domestic use	380	12	no	3800		1135		Pollari
167	MBMG24	Judith Basin	18N 12E 34	76	Well		Domestic use, water corrodes pipes	730	16	no	4000		25		Mytlyniatic
168	MBMG9	Judith Basin	18N 10E 24	76	Creek	2 cfs	Arrow Creek	690	16.5	no	4200				
169	MBMG22	Judith Basin	18N 11E 31	76	Reservoir			1280	24	no	4150				
170	MBMG11	Judith Basin	18N 10E 32	76	Well		Domestic use	770	12	no	4125	flowing			Kolar
171	MBMG8	Judith Basin	18N 09E 20 AD	76	Creek	0.6 cfs	Hay Creek	550	17	no	4400				
172	MBMG7	Judith Basin	18N 08E 24	78	Well		Domestic use	1110	18	no	4200				
173	MBMG10	Judith Basin	18N 08E 28	76	Creek	0.25 cfs	Bear Coulee	530	18	no	4340				
174	MBMG12	Judith Basin	17N 08E 05	76	Spring		Located 100 yards NE of house	380	13	no	4300				Busch
175	MBMG13	Judith Basin	17N 08E 10 AA	76	Spring			380	17	no	4400				
176	MBMG16	Judith Basin	17N 09E 16 CDDC	76	Spring			390	16.7	no	4410				Boon, Conrad
177	MBMG14	Judith Basin	17N 10E 09	76	Well	30 gpm	Domestic use	700	14	no	4200		595		Harlow
178	MBMG15	Judith Basin	17N 10E 17 B	76	Well	6 gpm		1180	13	no	4200	flowing	200		Evans, Gerald
179	MBMG26	Judith Basin	17N 11E 17	76	Reservoir		Stock reservoir	870	19	no	4200				
180	MBMG23	Judith Basin	17N 11E 01	76	Creek	1.6 cfs	Surprise Creek	850	22	no	4000				

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181	MBMG27	Judith Basin	17N 12E 18	76	Well		Domestic use	730	18	no	4150		35		Mitchell
182	MBMG25	Judith Basin	17N 12E 01	76	Well		Domestic use	450	12	no	3800				LeMund
183	MBMG29	Judith Basin	17N 12E 22	75	Creek	1.5 cfs	Wolf Creek	370	27	no	4000				
184	MBMG30	Judith Basin	17N 13E 19	76	Well		Domestic use	560	15	no	3950	5	27		Porter, Robert
185	MBMG28	Judith Basin	17N 13E 14	76	Well		Domestic use	470	15	no	3950	flowing	1500		Hess
186	MBMG31	Judith Basin	17N 13E 26	76	Well		Domestic use	470	16	no	3800	flowing	1565		Smith, George
187	76M1240	Judith Basin	16N 14E 07 BDAA	09 21 76	Well		Unused, test well HB 1 D 54	3475	15	yes		8	28	211CLRD	Holzer
188	MBMG38	Judith Basin	16N 13E 12	76	Spring		Domestic use, spring flows into Willow Creek	2150	12	no	3800				LaRock
189	MBMG37	Judith Basin	16N 13E 05	76	Spring		Domestic use	560	8	no	4150				Herick, J. R.
190	MBMG36	Judith Basin	16N 13E 06	76	Creek		Dry Wolf Creek	430	15	no	4200				
191	MBMG35	Judith Basin	16N 12E 10	78	Well		Domestic use	1220	16	no	4200	390	400		Leland
192	MBMG17	Judith Basin	17N 10E 35	78	Well	150 gpm		480	10	no	4600	20	562		Evans, Robert
193	MBMG18	Judith Basin	16N 09E 05 DBAD	76	Creek	40 cfs	Otter Creek	460	12.8	no	4770				
194	MBMG19	Judith Basin	16N 08E 09 ADBC	75	Spring			930	13	no	4650				Anderson
195	MBMG50	Judith Basin	16N 12E 28	76	Well			250	12.4	no	4000		800		Benjamen
196	MBMG49	Judith Basin	16N 13E 19	76	Well		Domestic use	440	10	no	4300		1200		Nelson, Edith
197	MBMG51	Judith Basin	16N 13E 34	76	Creek	2 cfs	Sage Creek	1100	16	no	4000				
198	MBMG56	Judith Basin	15N 13E 25	76	Well		Domestic use and lawn irrigation	500	15.3	no	4300	6	28		Hodge
199	MBMG55	Judith Basin	15N 12E 35	76	Well		Domestic use	620	12	no	4600				Larson
200	MBMG85	Teton	25N 02E 12	76	Well			1580	18	no	3190	4	20		Maurer, Mary
201	MBMG84	Teton	25N 02E 12	78	Well	15 gpm	Domestic use	1340	16	no	3190	4	20		Maurer, Mary
202	MBMG81	Teton	25N 02E 09	76	Well		Domestic use	920	13	no	3290				Maurer
203	MBMG83	Teton	25N 02E 07	78	Well		Domestic use	1410	17.5	no	3230				Dohenu
204	MBMG82	Teton	25N 01E 12	76	River	150 cfs	Teton River	930	18	no	3240				
205	MBMG80	Teton	25N 01E 11	08 29 76	Well			1760	19	no	3260		18		Haskel Brothers
206	MBMG25	Teton	25N 02W 14	78	River	40 cfs	Teton River	1050	18	no	3410				
207	MBMG24	Teton	25N 02W 11	76	Creek	10 cfs	Muddy Creek	680	18	no	3440				
208	MBMG22	Teton	26N 02W 32	76	Reservoir			210	19.5	no	3580				
209	not on map														
210	MBMG21	Teton	25N 03W 03	78	Well		Domestic use	570	18	no	3700	flowing	123		O.Keefe, John

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211	MBMG27	Teton	25N 03W 16	76	Well		Domestic use	920	10	no	3740	49	149		Larson
212	MBMG26	Teton	25N 03W 14	76	Well		Domestic use	520	19	no	3680				Reveare
213	not on map														
214	MBMG74	Teton	24N 01E 12 DDB	76	Well		Stock use	3250	10	no	3580	10	14		Lock, Frank
215	MBMG75	Teton	24N 02E 18	76	Well		Domestic use	1530	14	no	3600		16		Goodell
216	MBMG78	Teton	24N 02E 30 CAB	76	Well		Domestic use except for drinking	1340	16	no	3760		20		Schultz
217	not on map														
218	MBMG47	Teton	23N 01W 03 AAC	01 17 76	Well		Domestic use (?) except for drinking	21700	12	yes	3840		97		Toeckes, E
219	MBMG48	Teton	24N 01W 32 CDC	76	Well		Domestic use except for drinking	3960	16	no	3600		108		Keel
220	not on map														
221	MBMG50	Teton	23N 02W 03 DAB	76	Well	2 gpm	Stock use	2990	11.5	no	3780	7	10		Nelson
222	MBMG51	Teton	23N 02W 03 BBC	76	Reservoir		Stock reservoir	2740	16	no	3760				Nelson
223	MBMG52	Teton	24N 02W 32 ADC	76	Well		Domestic use except for drinking	3690	17	no	3880		90		Hagen
224	76M1477	Teton	24N 02W 32 ADC	12 08 78	Well		Stock use	6495	7	yes	3880		90	211CLHD	Hagen
225	not on map														
226	MBMG54	Teton	23N 03W 04 DDA	76	Spring			3570	17	no	4040				Bouma, Ed
227	MBMG55	Teton	23N 03W 10 DDA	76	Well		Not in use	600	10	no	4060	13	16		Anderson, Richard
228	not on map														
229	MBMG60	Teton	23N 02W 24 BBB	76	Well		Stock and domestic use (except for drinking)	1870	15	no	3680		24		Dirkes, Richard
230	MBMG61	Teton	23N 01W 19 BBC	76	Creek		Big Muddy Creek	10870	21	no	3700				
231	MBMG62	Teton	23N 01W 34 BAA	76	Creek	10 cfs	Muddy Creek'	770	17	no	3740				
232	MBMG63	Teton	22N 01W 04 DDA	76	Well	20 gpm	Domestic use	980	12.5	no	3660	12	18		Gettel, Arnold
233	MBMG67	Teton	22N 02W 17 BBB	76	Well		Domestic use	540	12	no	3890	10	16		
234	MBMG66	Teton	22N 02W 17 BBB	76	Well		Used for watering garden	490	16	no	3890	2	10		Verick
235	MBMG68	Teton	22N 03W 11 CCC	76	Well		Domestic use	420	12	no	3940		40		Meyer, Al
236	not on map														
237	MBMG86	Teton	22N 03W 33	76	Well		Domestic use	650	16	no	4000		25		Krause
238	MBMG69	Teton	22N 03W 25 BAB	76	Well		Domestic use	400	14.5	no	3935		8		Andrews
239	MBMG70	Teton	22N 02W 33 BCC	76	Well		Domestic use	950	17	no	3960				Gaarder
240	MBMG71	Teton	22N 02W 35 BBB	76	Well		Domestic use	1210	12	no	3920	16	18		Oakness

GREAT FALLS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at °C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
241	MBMG65	Teton	22N 02W 13 BBB	76	Well		Domestic use	590	16	no	3810	7	20		Hadley
242	MBMG72	Teton	22N 01W 30 DDA	76	Well		Domestic use	1210	12	no	3860		14		Stengnimse
243	MBMG64	Teton	22N 01W 11 CCD	76	Well		Domestic use	580	12.5	no	3700	1	20		Hadley
244	MBMG73	Teton	22N 01W 36 DBC	76	Well		Domestic use	460	14	no	3770		21		Smith
245	MBMG78	Teton	23N 01E 21 AAB	76	Creek	0.1 cfs	Lake Creek, salts line banks	9600	27	no	3720				
246	MBMG77	Teton	23N 01E 10 DDB	78	Reservoir		Edges of reservoir lined with salts	6520	21	no	3760				Dahlman
247	76M0261	Cascade	22N 02E 07 BCCB	04 16 76	Well		Gettel Jones test well	6340	6	yes	3760	8	27	112DRFT	Jones
248	MBMG85	Chouteau	24N 06E 03 BCC	76	Well		Stock use	4910	6	no	3020		86		Craig
249	MBMG96	Chouteau	22N 06E 23	78	Spring			870	16	no	2940				
250	MBMG126	Chouteau	23N 10E 13 CCDB	78	Well	2 gpm	Domestic use except for drinking	3690	12	no					
251	MBMG166	Chouteau	23N 13E 30 CCCC	76	Well	2 gpm	Domestic and stock use	2270	11	no	3000		86		Clark
252	75M1762	Chouteau	21N 11E 06 B	07 18 75	Well		Unused domestic well	9579	15.1	yes	3200	4	25	211CLRD	Brewer, W
253	76M0224	Chouteau	21N 11E 06 BBCC	04 07 76	Well		Unused	7354	8	yes	3240	3	290		Brewer, W.
254	76M0227	Chouteau	21N 11E 01 DBDD	04 07 76	Well		Unused, Geraldine test well	3368	16	yes					
255	76M0222	Chouteau	22N 08E 04 DDBB	04 06 76	Well		Davis test well	34630	8	yes	3310		13	112TILL	
256	72M0636	Chouteau	22N 08E 09 A	08 20 72	Well		Davis test well 21	317000	16.4	yes					
257	76M0221	Chouteau	22N 08E 26 AACC	04 06 78	Well	0.2 cfs	Keller test well	3048	13	yes	3300			112TILL	
258	76M0220	Chouteau	22N 08E 34 AABB	04 08 78	Well		Long test well	40120	18	yes				112TILL	
259	76M0226	Chouteau	22N 11E 30 DDBB	04 07 78	Well		Railroad well	3927	18	yes	3130		25		Brewer, W.
260	75M1761	Chouteau	22N 11E 31 A	07 18 76	Reservoir		Brewer Reservoir	4706	22.6	yes	3200			211CLRD	Brewer, W.
261	76M0225	Chouteau	22N 11E 31 ADAC	04 07 78	Reservoir		Brewer Reservoir	8563	16	yes	3180				Brewer, W.
262	76M1612	Chouteau	22N 13E 27 CCDC	01 16 77	Well		Domestic and stock use	4346	12	yes	3060	22	70	211EGLE	Clark, D.
263	76M1236	Fergus	18N 13E 26 DDD	09 21 76	Spring		Municipal supply	872	11	yes				110TRRC	
264	72M0083	Fergus	19N 13E 22 BAC	06 11 72	Well	26 gpm (E)	Domestic use	838		yes	2400			221SWFT	Ployhar, T.
265	76M0229	Fergus	18N 13E 29 BCAA	04 07 78	Well		Brinkman test well D10 B2 74	7486	6	yes		2	13	110TRRC	Brinkman
266	76M0238	Fergus	19N 13E 29 BABB	04 10 78	Well		Unused, Brinkman test well	1877	8	yes		6	33	110TRRC	Brinkman
267	76M0228	Fergus	19N 13E 29 BCCC	04 07 76	Well		Brinkman test well D16 B7 74	1462	10	yes			33	110TRRC	Brinkman
268	76M0223	Chouteau	23N 08E 22 DCAC	04 06 78	Well	0.2 gpm (E)	Hanford test well, F140 H18 70	24060	10	yes	3250		33	112TILL	Hanford
269	76M1602	Chouteau	24N 06E 10 BCBA	07 14 77	Well			1606	8	yes	2970		27	110ALVM	Bridge, Buck
270	76M1242	Judith Basin	16N 13E 01 DDBD	09 21 78	Well		Holzer test well HB 9D 66	13180	16	yes			28	211CLRD	Holzer

GREAT FALLS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
271	76M0235	Judith Basin	16N	14E	07	BBDA	04	09	76	Well		Holzer test well D56 HB4 75	8051	9	yes			23	110CLVM	Holzer
272	76M1241	Judith Basin	16N	14E	07	BDDB	09	21	76	Well		Holzer test well HB 11D 55	13830	15	yes		8	28	211CLRD	Holzer
273	MBMG32	Judith Basin	17N	13E	28				76	Well		Domestic use	570	12	no	3800		2000		Smith, David
274	MBMG33	Judith Basin	17N	13E	28				78	Well		Stock use	1430	11.5	no	3800		131		Smith, George
275	not on map																			
276	MBM684	Fergus	19N	13E	12	CD			78	Well		Domestic use	810	17	no		flowing			

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
57	25N	06E	35	DCCA	01	14	77	Well	32.2	23.8	875	5.5	.09	.08	5.8	741		26	1346
60	24N	06E	28	DCCD	01	1	77	Well	464	154	232	34.8	3.8	.08	9.8	279		134	1813
78	24N	08E	28	DDAA	01	18	77	Well	207	108	253	34.4	.09	.23	11.8	620		94	1164
103	23N	11E	24	CDDA	01	18	77	Well	277	164	548	9.9	2.17	.51	21.2	698		46	1875
107	23N	12E	02	CDDA	01	15	77	Well	102	116	1570	7.5	.03	.06	12.5	1533		198	2442
108	24N	12E	22	AAAD	01	15	77	Well	19.4	16	885	3.3	.03	.01	7.5	702	10.1	146	1174
109	26N	12E	27	ABCB	01	15	77	Well	6.1	2.1	825	2.4	.01	.01	8.5	1041	10.6	116	932
124	22N	11E	15	BCCB	01	15	77	Well	214	65	442	6.1	3.33	.42	18.2	448		26	1306
135	21N	07E	13	BAAA	02	18	77	Spring	58	41	28	3.4	.01	.01	19.6	349	1.0	4.2	38.9
149	21N	13E	07	BBBC	01	15	77	Well	394	188	339	9.3	.23	.11	11.6	551		83	1840
156	19N	13E	28	AAA	09	21	76	Well	64.5	123	750	2.9	.22	.03	10.8	563	3.8	90	1608
167	18N	13E	29	BCBD	09	21	76	Well	52.5	79.5	125	1.7	.16	.01	15.8	455		7.5	275.5
187	18N	14E	07	BDAA	09	21	76	Well	164	258	346	13.6	.11	.13	10.3	383		49	1808
218	23N	01W	03	AAC	01	17	76	Well	390	1975	4600	28	.14	.10	10.6	889		200	16623
224	24N	02W	32	ADC	12	08	76	Well	525	560	480	23.9	.11	.04	7.1	366		109	3341
247	22N	02E	07	BCCB	04	15	76	Well	426	592	340	6.7	.40	13.0	52.1			178	4980
252	21N	11E	06	8	07	18	75	Well	430	850	698	35.4	.16	.28	16.5	492		14.4	4768
253	21N	11E	06	BBCC	04	07	76	Well	90	712	880	25	.10	.28	1.0	184		81	4672
254	21N	11E	01	DBDD	04	07	78	Well	214	154	420	35	.26	.10	17.2	507		10.0	1634
255	22N	08E	04	DDBB	04	06	76	Well	424	6700	5350	45	.21	.32	8.8	539		268	36735
256	22N	08E	09	A	08	20	72	Well	446	6295	5600	45.0	1.4	1.1	18	546			36730
257	22N	08E	25	AACC	04	06	76	Well	410	118	220	8.7	.15	1.35	18.8	331		35	1818
258	22N	08E	34	AABB	04	06	78	Well	460	4160	9800	100	.19	1.57	8.9	1452		128	36010
259	22N	11E	30	DDBB	04	07	76	Well	77	114	700	30	.70	.13	24.1	718		13	1676
260	22N	11E	31	A	07	18	75	Reservoir	235	326	530	24.4	.08	.06	3.0	36	13.4	203.4	2291
261	22N	11E	31	ADAC	04	07	78	Reservoir	436	732	1120	35	.19	.03	1.0	378		243	4913
262	22N	13E	27	CCDC	01	16	77	Well	61	56.5	1010	5.5	.18	.02	9.7	1000		48	1587
263	18N	13E	25	DDD	09	21	78	Spring	40.2	44.6	32.8	1.4	.03	<.01	10.6	294		.4	45.3
264	19N	13E	22	BAC	06	11	72	Well	44	18	73	6.5		.01	12.2	265	14	3.5	105
265	19N	13E	29	BCAA	04	07	76	Well	135	380	1400	1.7	.37	.03	9.3	817		120	3854
266	19N	13E	29	BABB	04	10	76	Well	91	107	160	4.	.05	<.01	11.2	383		33	564.5
267	19N	13E	29	BCCC	04	07	78	Well	56.3	78.5	160	3.2	.12	<.01	12.2	498		8.0	321.9
268	23N	08E	22	DCAC	04	06	78	Well	396	3000	4100	50	.13	.39	8.2	1182		266	19360
269	24N	08E	10	BCBA	01	14	77	Well	87.5	84	149	3.1	.02	.06	4.6	374		32	600
270	18N	13E	01	DDBD	08	21	78	Well	415	1420	1950	23.2	.10	.03	11.4	600		180	9518
271	16N	14E	07	BBDA	04	09	76	Well	474	590	1100	8.6	.18	.30	8.4	385		73	5361
272	16N	14E	07	BDDB	09	21	78	Well	294	1865	1730	30	.84	.41	9.3	627		180	11031

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

1" x 2" Sheet

of Selected Waters

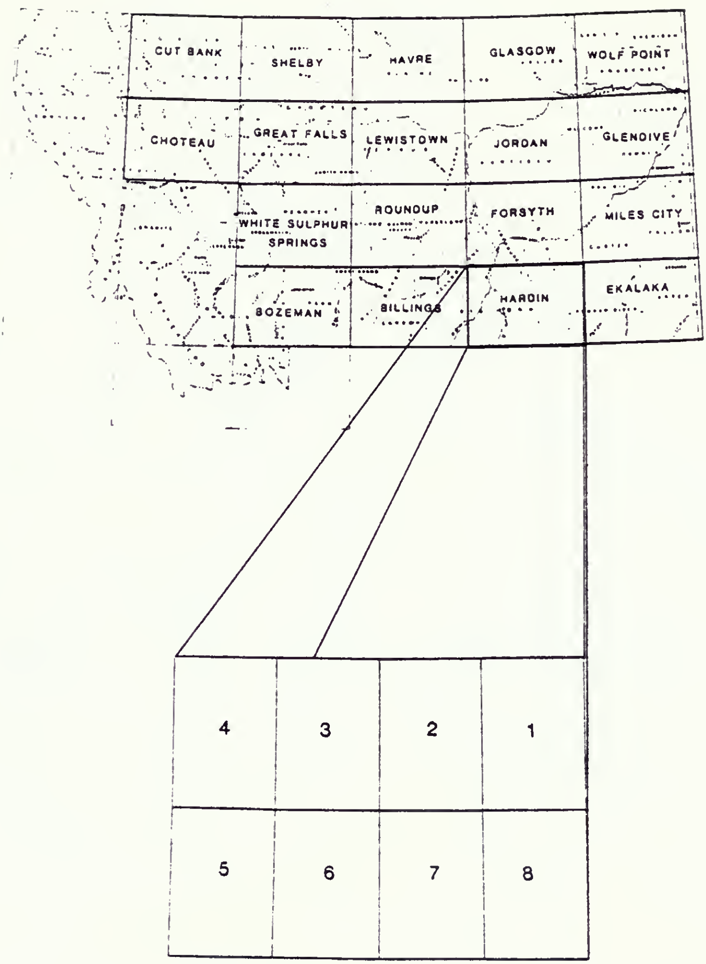
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
57	.249	1.0	8.16	9	3749	2681	178	608	28.5	MBMG	185	211CLRD	Yes	76M1601
60	.368	1.7	7.51	12	3478	2985	1790	229	2.4	MBMG	1618	217KOTN	Yes	76M1603
78	.023	3.0	7.38	15	2862	2253	1260	509	3.1	MBMG	2022	221SWFT	Yes	76M1616
103	.029	.5	7.49	12	3890	3288	1370	572	6.5	MBMG	135	211CLRD	Yes	76M1617
107	6.777	.4	7.63	6	6768	5209	728	1260	25.3	MBMG	184	211EGLE	Yes	76M1613
108	.032	1.2	8.45	20	3737	2608	114	593	36.0	MBMG	481	211EGLE	Yes	76M1614
109	.156	1.8	8.43	14	3722	2517	24	871	82.4	MBMG	302	211EGLE	Yes	76M1615
124	.108	.9	7.70	6	2909	2302	802	367	6.8	MBMG	70	211CLRD	Yes	76M1609
135	10.844	.5	8.33	5.2	677	379	318	288	0.7	MBMG		211MSBY	No	76M1642
149	.156	.3	7.48	7	3871	3135	1750	452	3.5	MBMG	17	112DRFT	Yes	76M1610
156	.565	6.1	8.32	14	3910	2937	667	468	12.6	MBMG	24	110TRRC	Yes	76M1248
157	12.990	2.2	7.87	16	1270	797	458	373	2.5	MBMG	28	110TRRC	Yes	76M1247
187	.054	.6	7.22	15	3475	2839	1470	314	3.9	MBMG	28	211CLRD	Yes	76M1240
218	82.803	.9	7.70	12	21700	24239	9100	729	20.5	MBMG	97	210CLRD	Yes	76M1618
224	158.14	.2	7.53	7	6495	5475	3870	300	3.5	MBMG	90	211CLRD	Yes	76M1477
247	10.392	.3	4.08	8	6340		3500		2.5	MBMG	27	112DRFT	Yes	76M0251
252	237.300	.2	7.98	15.1	9579	7281	4570	492	1.1	MBMG	26	211CLRD	Yes	75M1762
253	25.189	.1	7.75	8	7354	6478	3150	161	8.8	MBMG	290		Yes	76M0224
254	.228	.3	7.81	15	3368	2736	1170	416	5.3	MBMG			Yes	76M0227
255	255.730	.8	7.27	8	34630	50050	26600	442	13.8	MBMG	13	112TILL	Yes	76M0222
256	918	.9	7.45	18.4	317000	50880	447	27100	14.8	MBMG			Yes	72M0636
257	.188	.4	7.80	13	3048	2592	1500	271	2.6	MBMG		112TILL	Yes	76M0221
258	397.602	.5	7.69	18	40120	51780	18300	1190	31.5	MBMG		112TILL	Yes	76M0220
259	4.609	.5	7.73	18	3927	2897	661	589	11.8	MBMG	25		Yes	76M0226
260	106.672	.2	8.62	22.5	4705	3751	1930	49	1.9	MBMG	1	211CLRD	Yes	75M1761
261	205.126	.1	7.66	15	9563	7871	4100	308	7.9	MBMG	1		Yes	76M0225
262	.029	1.1	7.87	12	4346	3272	385	820	22.4	MBMG	70	211EGLE	Yes	76M1612
263	16.491	1.5	7.92	11	672	338	284	241	0.8	MBMG		110TRRC	Yes	76M1236
264		.2	8.41		638	400	175	256	2.4	USGS		221SWFT	No	72M0083
265	2.824	2.5	7.98	5	7486	6309	1900	670	14.0	MBMG	13	110TRRC	Yes	76M0229
266	9.443	2	8.10	8	1677	1161	668	314	2.5	MBMG	33	110TRRC	Yes	76M0238
267	12.719	2	8.15	10	1462	900	464	408	3.2	MBMG	33	110TRRC	Yes	76M0228
268	133.862	.6	7.68	10	24060	27890	13300	969	16.4	MBMG	33	112TILL	Yes	76M0223
269	.678	.4	8.12	9	1606	1056	589	307	2.7	MBMG	27	110ALVM	Yes	76M1602
270	97.593	.6	7.74	15	13160	13910	6880	492	10.2	MBMG	28	211CLRD	Yes	76M1242
271	3.219	.6	7.64	9	8051	7809	3810	315	8.0	MBMG	23	110CLVM	Yes	76M0235
272	<.023	.9	7.17	15	13830	15430	8410	514	8.2	MBMG	28	211CLRD	Yes	76M1241

GREAT FALLS 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
57	25N 06E 35 DCCA	<.05	<.2	<2.0		1.0		<.01	<.01	<.05	.20	<.3	<.01	.192	<2.0		1.04	<.05	.05	76M1601
60	24N 06E 28 DCCD	<.05	<.2	<2.0		.18		<.01	.02	<.05	.53	<.3	.03	.026	<2.0		8.50	.53	<.01	76M1603
78	24N 09E 28 DDAA	<.05	<.2	<2.0		.64		<.01	<.01	<.05	.57	<.3	.01	.020	<2.0		7.00	1.32	.01	76M1616
103	23N 11E 24 CDDA	<.05	<.2	<2.0		.88		<.01	<.01	.05	.26	<.3	.03	.065	<2.0		5.45	.97	.04	76M1617
107	23N 12E 02 CDDA	<.05	<.2	<2.0		2.1		<.01	.01	<.05	.46	<.3	.02	.072	31.8		3.62	1.20	1.59	76M1613
108	24N 12E 22 AAAD	<.05	<.2	<2.0		1.6		<.01	.35	<.05	.15	<.3	<.01	.104	<2.0		.68	1.26	1.25	76M1614
109	25N 12E 27 ABCB	<.05	<.2	<2.0		2.6		<.01	.07	<.05	.14	<.3	<.01	.020	<2.0		.50	1.43	.06	76M1615
124	22N 11E 15 BCCB	.05	<.2	<2.0		.74		<.01	.01	<.05	.12	<.3	.02	.066	<2.0		2.16	.66	.04	76M1609
149	21N 13E 07 BBBC	<.05	<.2	<2.0		.34		<.01	.02	.06	.19	<.3	.03	.088	<2.0		4.31	1.23	.15	76M1610
156	19N 13E 29 AAA	.48	<.2	2.0		2.8		<.01	.01	.07	.13	<.3	.03	.027	<2.0		1.61	.23	.01	76M1248
157	19N 13E 29 BCBD	.27	<.2	<2.0		1.1		<.01	.01	<.05	.11	<.3	.02	.091	7.8		1.44	.15	.02	76M1247
187	16N 14E 07 BDAA	.09	<.2	<2.0		.93		<.01	.01	.10	.15	<.3	.05	.170	16.2		1.16	.64	.12	76M1240
218	23N 01W 03 AAC	<.05	.87	<2.0		.93		.04	.05	.43	4.10	<.3	.26	.065	220		11.6	9.75	.40	76M1618
224	24N 02W 32 ADC	.05	.38	<2.0		1.1		.01	.03	.20	.49	<.3	.10	.023	713		6.9	.95	7.00	76M1477
247	22N 02E 07 BCCB	178.7	.25	<2.0	24	.9	.04	.03	.07	.19	4.16	.38	3.5	.153	6.4		.23	.55	7.30	76M0251
252	21N 11E 06 B			<2.0		.23	.02			.19	.07			.166			2.51			76M1762
253	21N 11E 06 BBCC	<.05	.2	<2.0	<5	.8	.02	.02	.02	.18	.16	<.3	.08	.026	125		.87	.67	.03	76M0224
254	21N 11E 01 DBDD	<.05	<.2	<2.0	<5	.7	.01	<.01	.01	.08	.15	<.3	.04	.026	<2.0		3.68	.2	.01	76M0227
266	22N 08E 04 DDBB	.10	2.0	<2.0	<5	2.7	.08	.12	.12	.77	1.40	<.2	.46	.205	680		8.9	4.12	.13	76M0222
268	22N 08E 08 A	2.0					.06	.22	.12	1.3	.99		.42			.13	7.7		.10	72M0636
257	22N 08E 25 AACC	<.05	<.2		<6	.3	.01	.01	.02	.08	.07		.05	.026			4.03	.19	.02	76M0221
258	22N 08E 34 AABB	.10	2.3	<2.0	<5	1.3	.09	.11	.11	.64	4.51	<.3	.51	.046	900		12.6	3.04	.09	76M0220
268	22N 11E 30 DDBB	.16	<.2	<4.6	<6	1.2	.01	<.01	.01	.08	.27	<.3	.03	.065	5.3		2.86	.16	.03	76M0226
260	22N 11E 31 A			<2.0		.27	<.01			.07	.13			.023	633		2.05			76M1761
261	22N 11E 31 ADAC	.14	.2	<2.0	<6	.5	.02	.03	.04	.22	.26	<.3	.11	.049			6.76	.85	.05	78M0225
262	22N 13E 27 CCDC	<.05	<.2	<2.0		2.3		<.01	<.01	<.06	.21	<.3	.01	.033	<2.0		3.27	.57	.06	76M1612
263	18N 13E 26 DDD	.05	<.2	<2.0	<6	.2	<.01	<.01	<.01	<.06	.05	<.3	.01	.039	2.3	<.01	.74	.16	.01	76M1236
265	19N 13E 29 BCAA	.64	<.2	<2.0	<6	2.9	.01	.01	.02	.10	.15	<.3	.07	.104	10.9		3.39	.45	.06	76M0229
266	19N 13E 29 BABB	.07	<.2	<2.0	<5	.6	.01	<.01	.01	.06	.09	<.3	.02	.147	8.3		1.68	.2	.02	76M0238
267	19N 13E 29 BCCC	.21	<.2	<2.0	<5	1.0	<.01	<.01	.01	<.05	.08	<.3	.02	.033	168		1.52	.11	.04	76M0228
268	23N 08E 22 DCAC	<.05	1.35	<2.0	<5	2.2	.05	.07	.09	.50	4.73	<.3	.33	.033	1600		8.2	2.74	.06	76M0223
269	24N 06E 10 BCBA	<.05	<.2	<2.0		.12		<.01	.01	<.05	.06	<.3	<.01	<.007	<2.0		1.06	.05	.12	76M1602
270	16N 13E 01 DDBD	.06	.80	<2.0		2.8		.03	.06	.34	1.60	<.3	.16	.072	760		8.66	3.16	.04	76M1242
271	16N 14E 07 BBDA	<.05	<.2	<2.0	<6	1.8	.02	.01	.03	.16	.07	<.3	.11	.039	90		1.72	.65	.15	76M0236
272	16N 14E 07 BDDB	.07	.80	4.3		2.3		.03	.06	.38	.68	<.3	.17	.046	2.0		3.52	3.42	.06	78M1241

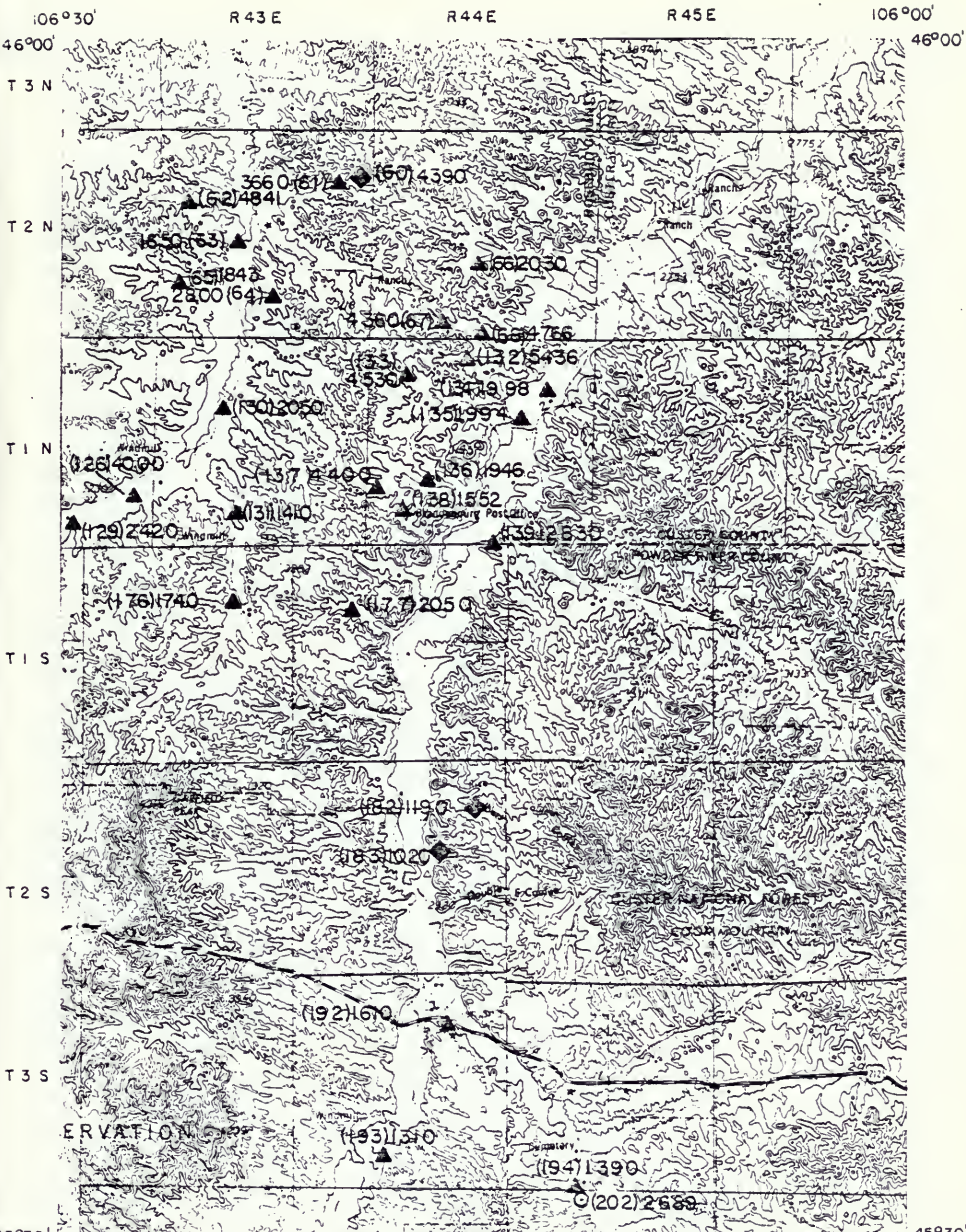
LOCATION BASE MAP



HARDIN 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

HARDIN 1



1:250,000

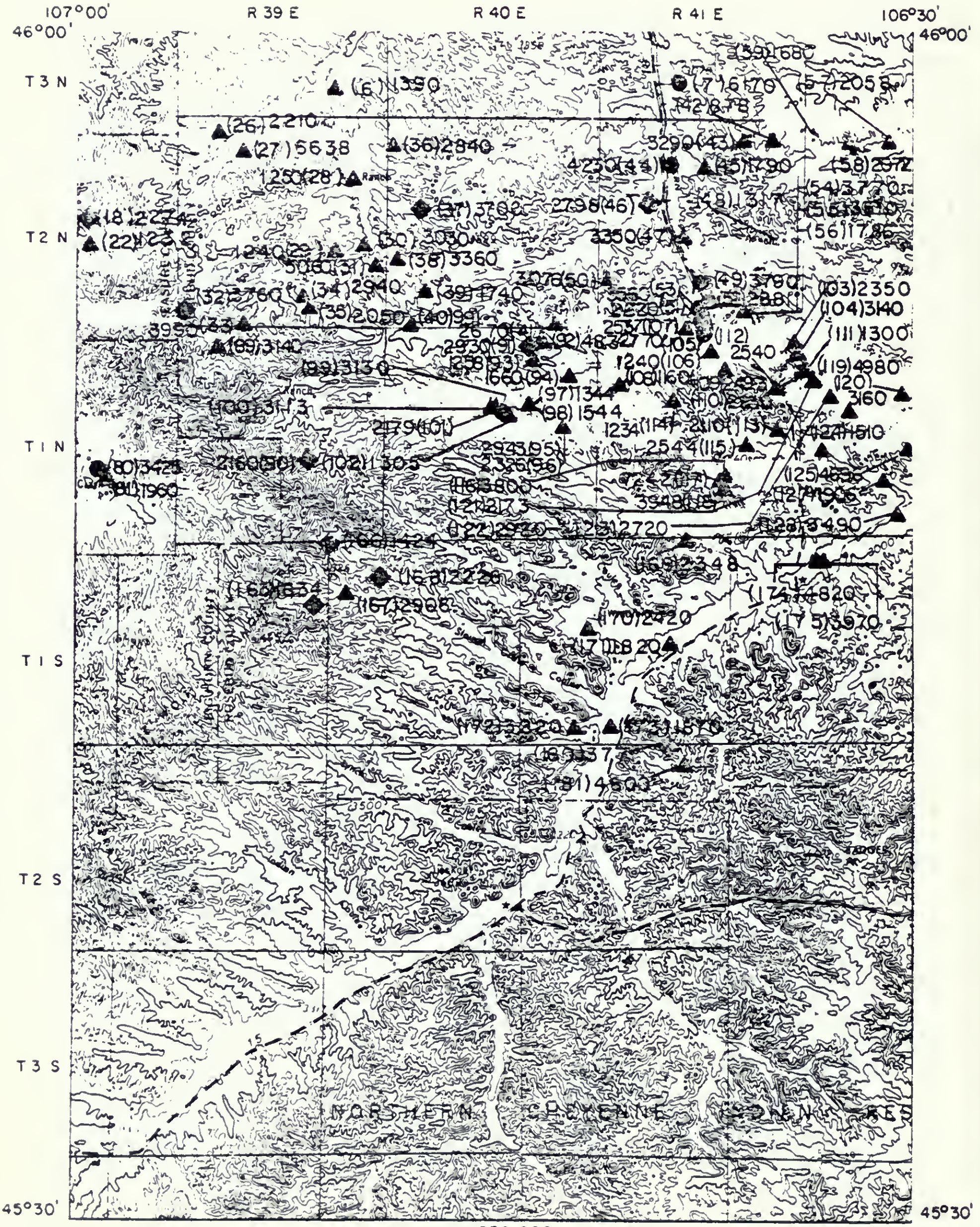
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

HARDIN 2



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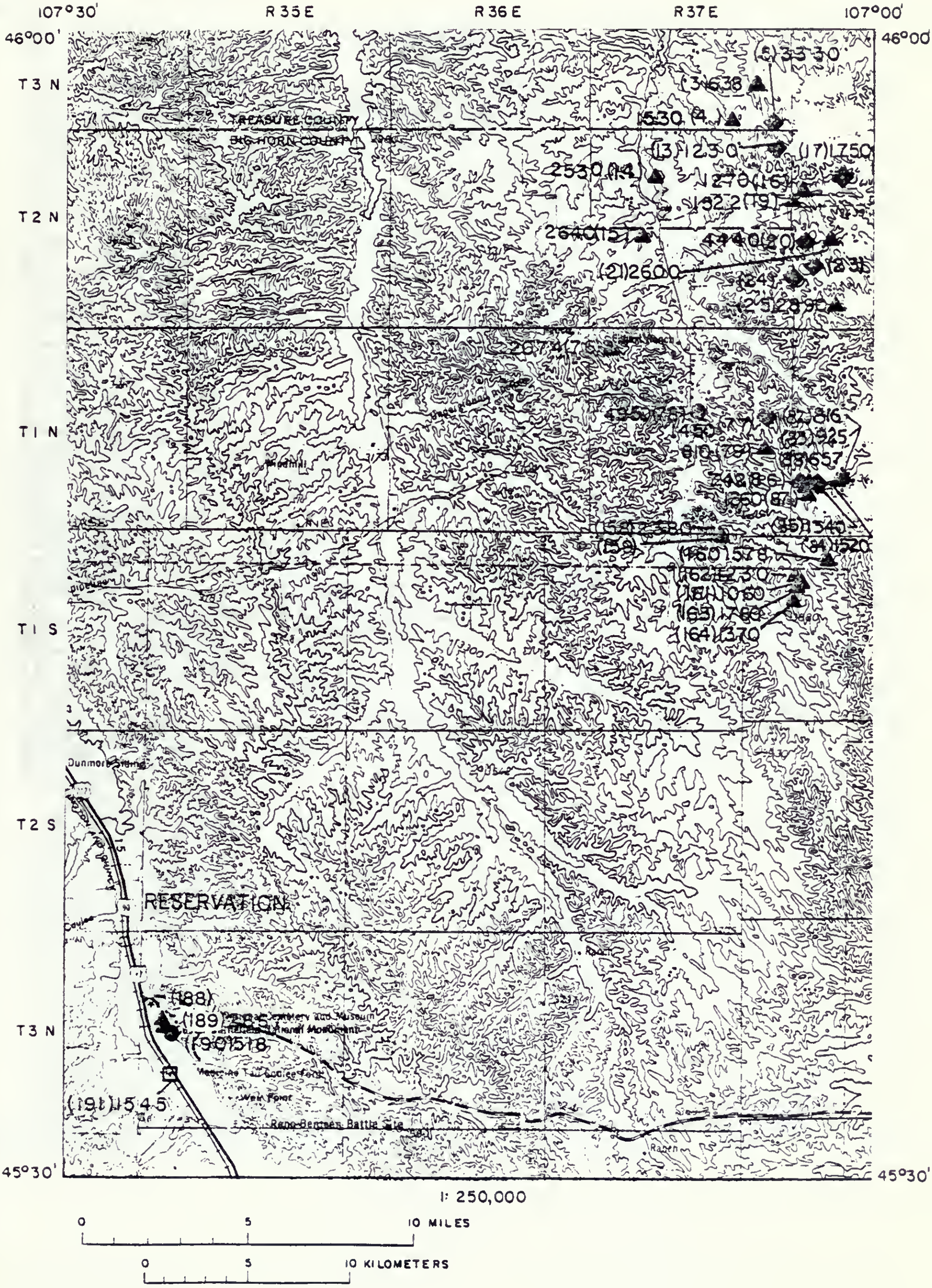
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

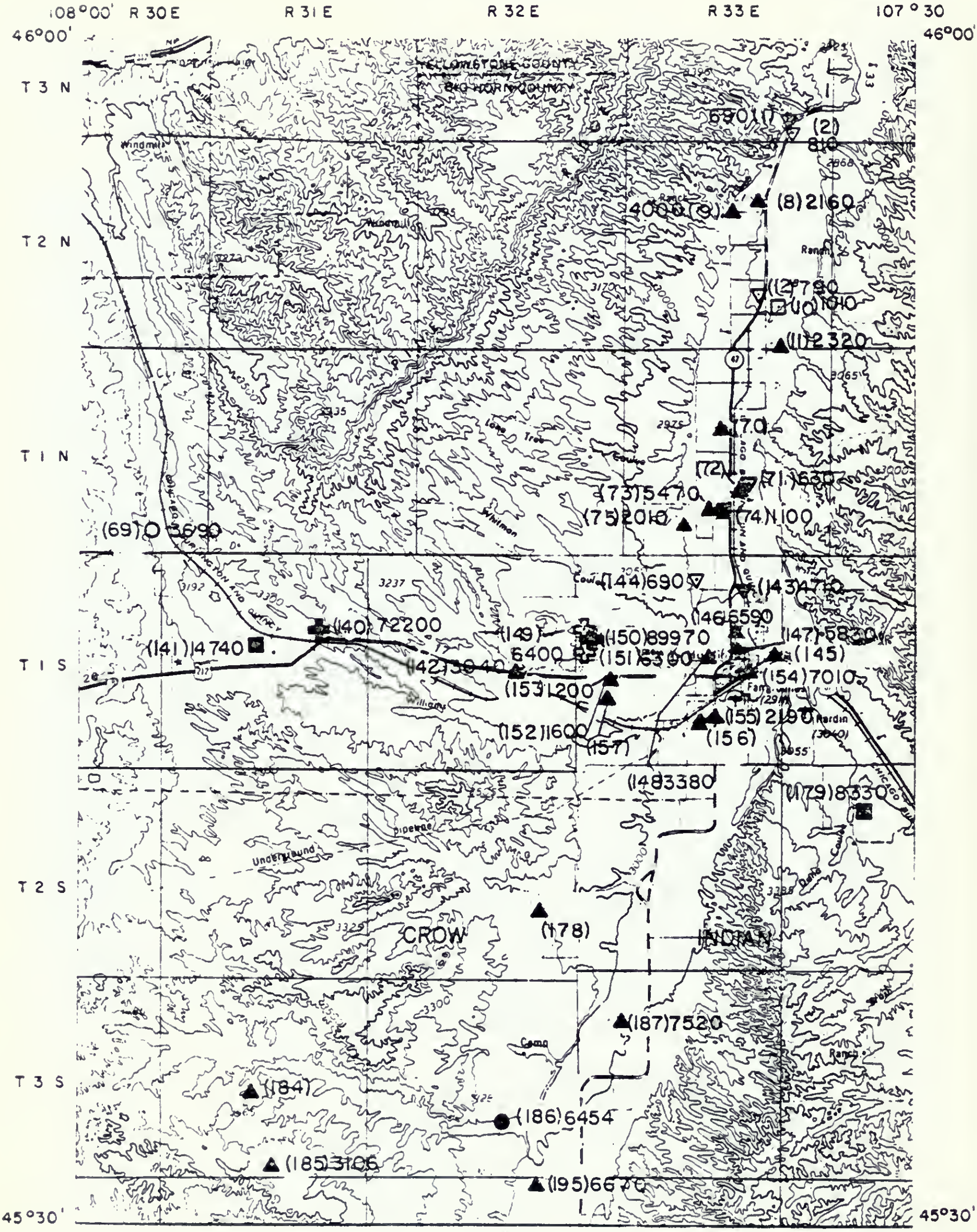
SPECIFIC CONDUCTANCE SURVEY

HARDIN 3



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



1: 250,000

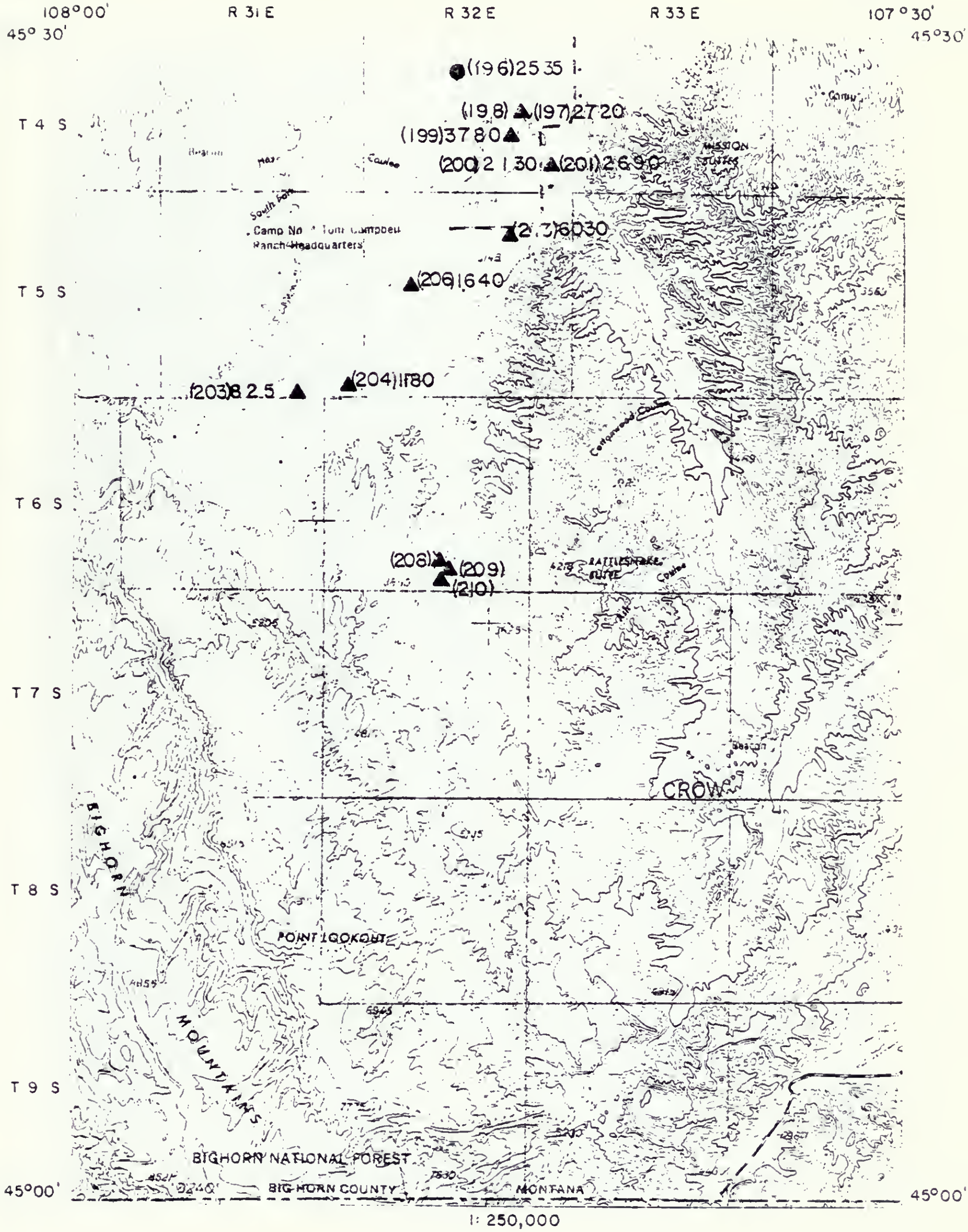
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

HARDIN 5



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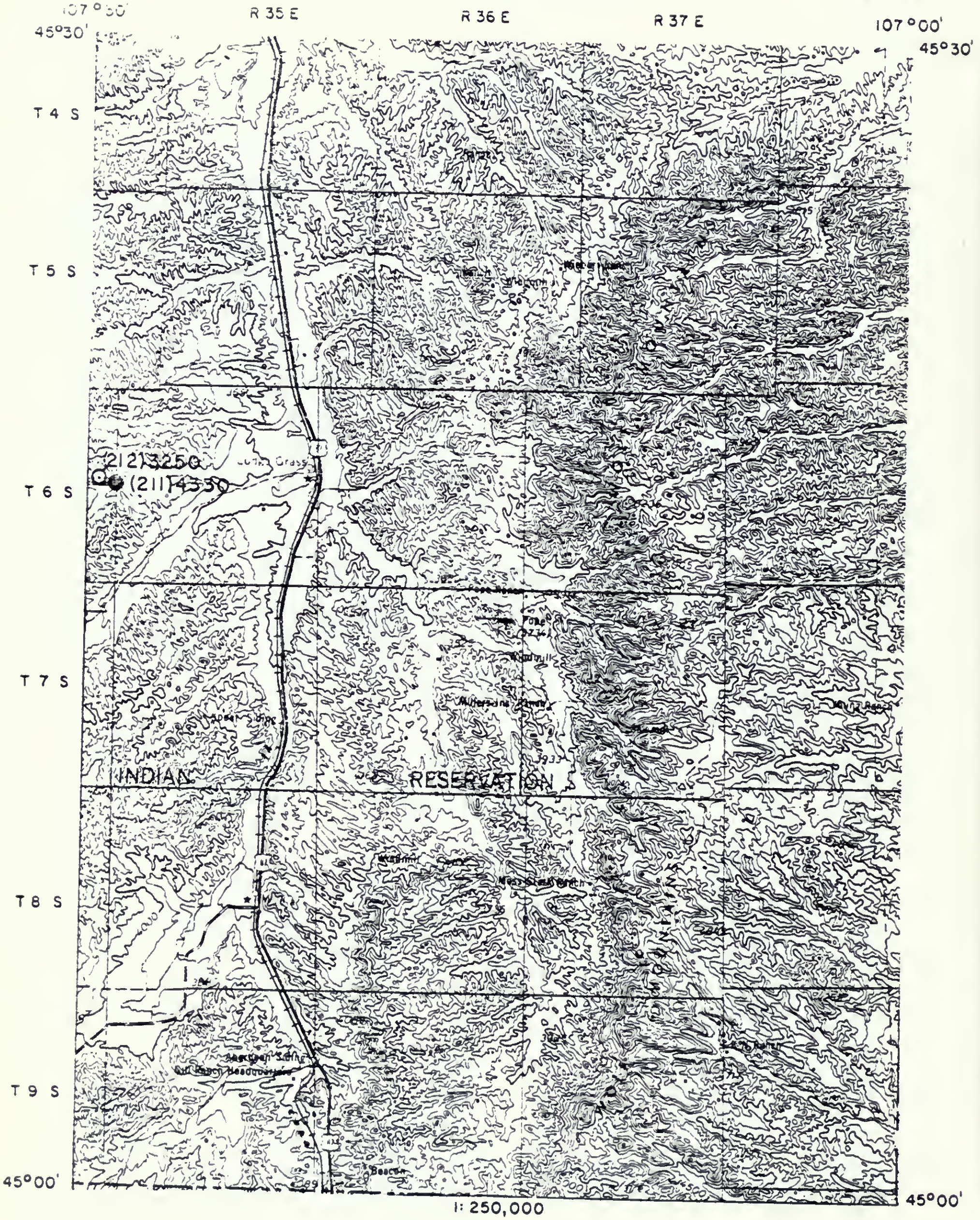
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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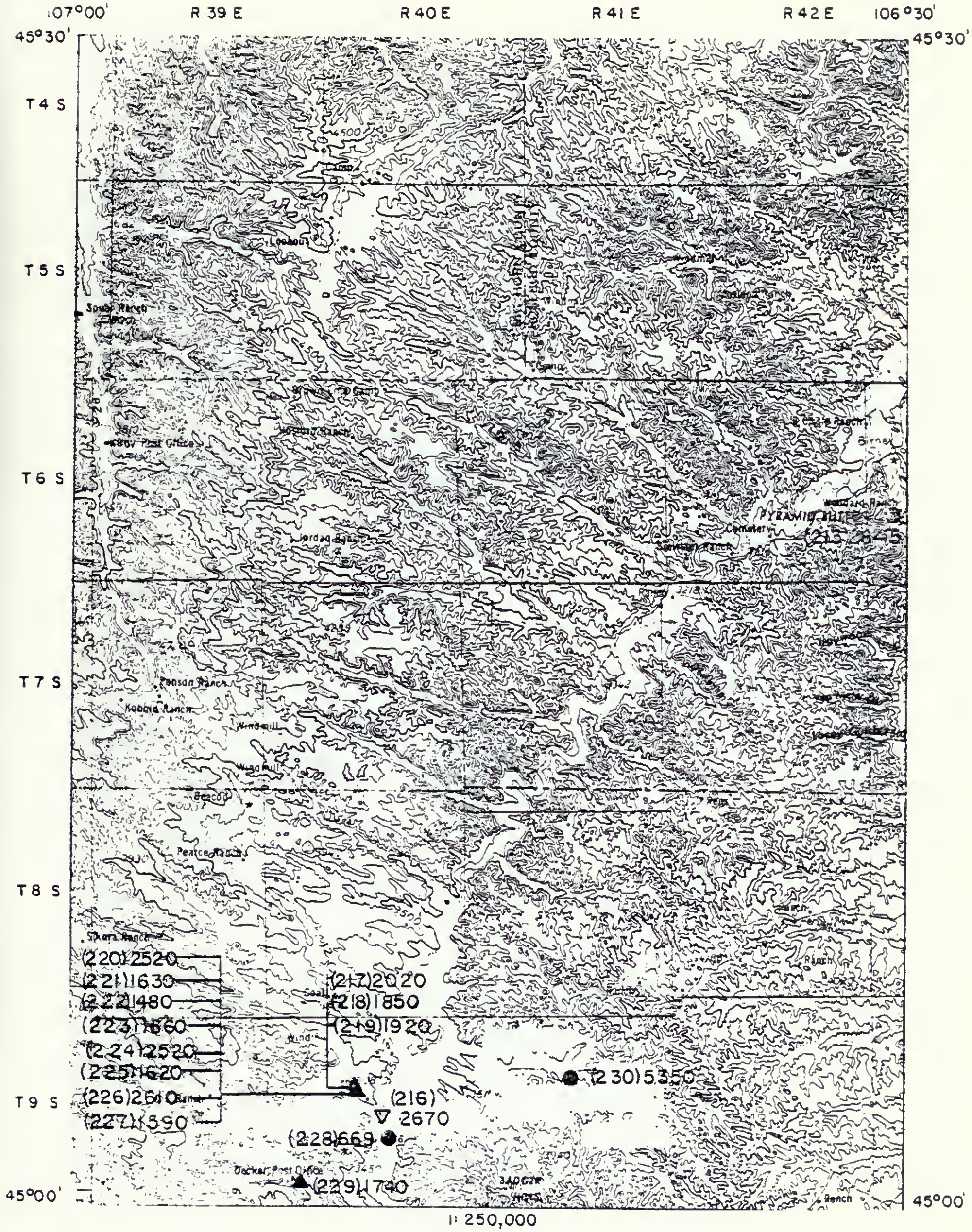
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



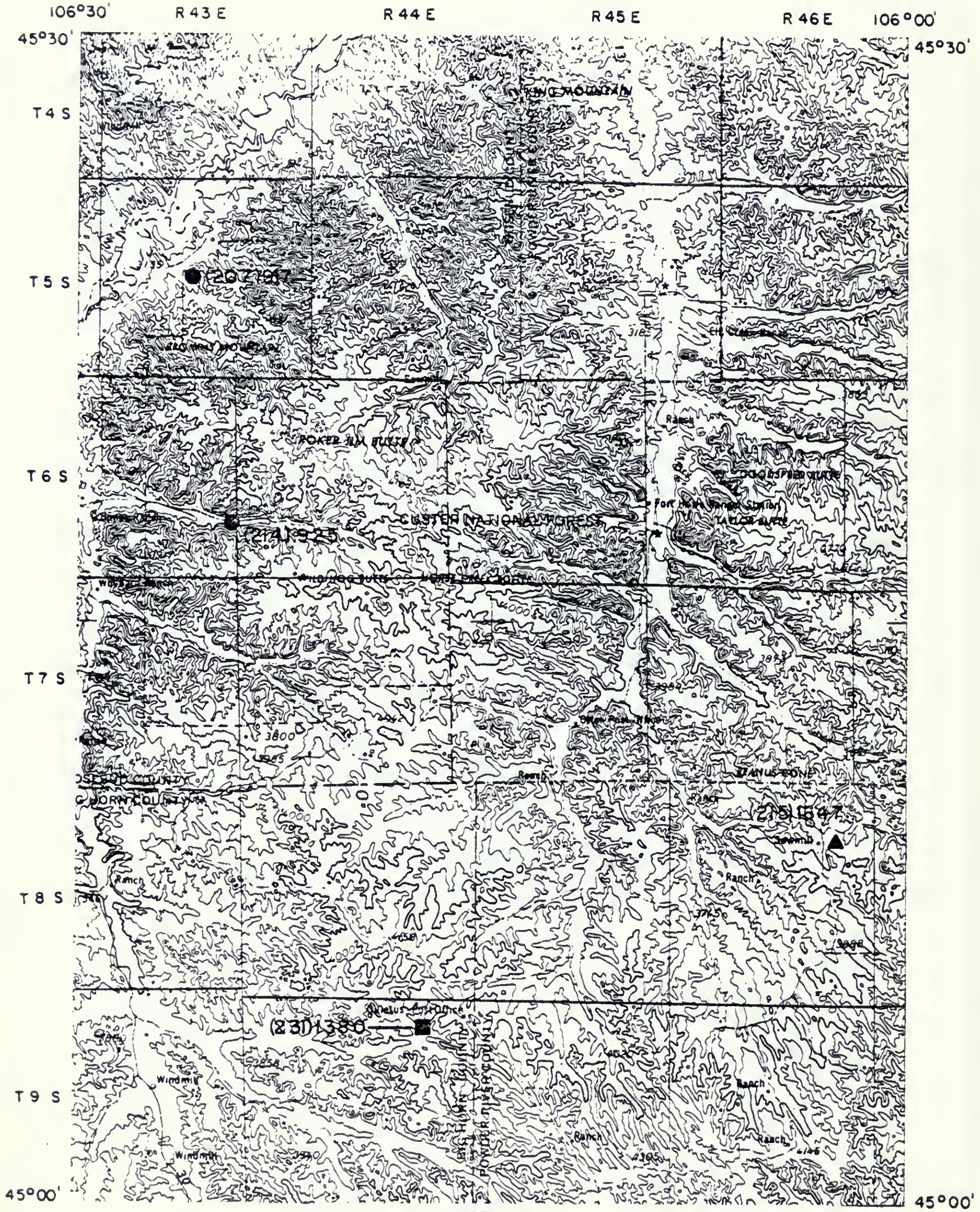
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

HARDIN 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQ88	Big Horn	03N 33E 35 ACD	09 15 76	Ditch	15 cfs (E)	Leggin irrigation return	690		no					
2	WQ89	Big Horn	03N 33E 35 DBD	09 15 76	Ditch	15 cfs (E)	Irrigation return	810		no					
3	74M109	Treasure	03N 37E 26 DACD	06 27 73	Well		Domestic and stock use	638	12	yes	3300				Wilson
4	73M600	Treasure	03N 37E 35 CDB	06 26 73	Well		Stock use	1530	1.2	yes	3200				Goedert, Clarence
5	74M0029	Treasure	03N 37E 36 CDDA	09 03 73	Spring		Stock use	3330	29	yes	3240			125TGRV	
6	73M661	Rosebud	03N 39E 36 BACD	07 26 73	Well	2 gpm (E)	Stock use	1390	13.6	yes	3130	11	235	126TLCK	Dowlin, M. G.
7	73M583	Rosebud	03N 41E 28 CCDD	07 24 73	Creek		Stock use	6170	19.5	yes	3040				
8	21M0103	Big Horn	02N 33E 10 DD	10 17 21	Well		Domestic use	2160	11	yes	2820	25	202	211HLCK	
9	14M0003	Big Horn	02N 33E 15 BB	10 17 14	Well		Domestic use	4000		yes	2860		81	211HLCK	
10	WQ86	Big Horn	02N 33E 26 CD	09 15 76	Pond	no flow	Thirty acre saline pond	1010		no					
11	00M0024	Big Horn	02N 33E 35 CD		Well			2320	14	yes	2820				
12	WQ87	Big Horn	02N 33E 27 DAA	09 15 76	Canal	15 cfs (E)	Irrigation return	790		no					
13	73M0596	Treasure	02N 37E 01 ADBA		Spring			1230	13.6	yes	3270				Wilson
14	74M20	Treasure	02N 37E 08 ADDC	06 25 73	Well		Domestic use	2530	10.5	yes	3090			125TGRV	
15	73M0601	Big Horn	02N 37E 20 ABDB	06 26 73	Well		Stock use	2640	1.1	yes	3200				May, Charles
16	73M598	Treasure	02N 38E 07 DCCC		Well		Stock use	1270	10	yes	3300			125TGRV	Hays
17	74M125	Treasure	02N 38E 08 ACDA	07 03 73	Spring		Stock use	1750	21	yes	3400			125TGRV	Hays
18	74M120	Treasure	02N 38E 16 ADAC	03 15 74	Spring		Stock use	2274	23	yes	3420			125TGRV	
19	74M21	Treasure	02N 38E 18 ABBB	06 26 73	Well		Domestic use	1522	9	yes	3310			125TGRV	
20	73M597	Treasure	02N 38E 19 ACDA	07 73	Spring		Stock use	4440		yes	3400			125TGRV	
21	74M0030	Treasure	02N 38E 20 BDAC	07 73	Well		Stock use	2600	10	yes	3420			125TGRV	Howard
22	74M119	Treasure	02N 38E 22 BBAB	07 02 73	Well		Stock use	1232	10	yes	3500				Farley
23	74M124	Treasure	02N 38E 30 AABD	07 09 73	Spring	1 gpm (E)	Stock use		18	yes	3460				Cass
24	74M0220	Treasure	02N 38E 30 BCCC	10 05 73	Spring	1 gpm (E)	Stock use		11	yes	3500			125TGRV	Cass, F.
25	74M221	Treasure	02N 38E 32 ABDB	07 10 73	Well	0.6 gpm (M)	Stock use	2890	13.0	yes	3520			125TGRV	Cass, F
26	73M807	Rosebud	02N 39E 05 BCBD	09 13 73	Well	8 gpm (M)	Stock use	2210	11	yes	3210			125TGRV	Ashenhurst
27	73M800	Rosebud	02N 39E 05 DDDC	09 13 73	Well	0.1 gpm (M)	Stock use	6638	13.5	yes	3170	15		110ALVM	Ashenhurst
28	73M14	Rosebud	02N 39E 12 CCCB	11 10 72	Well	12 gpm (M)	Domestic use	1250	13.5	yes	3160			125TGRV	Dowlin, M. G.
29	73M662	Rosebud	02N 39E 23 CAAB	07 26 73	Well		Stock use	1240	27	yes	3360	98		125TGRV	Dowlin, M. G.
30	73M664	Rosebud	02N 39E 24 CDAB	07 25 73	Well	15 gpm (E)	Stock use	3030		yes	3250	60	140	125TGRV	Dowlin, M. G

HARDIN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	73M652	Rosebud	02N 39E 25 ACDC	07 12 73	Well	4 gpm (E)	Stock use	5060		yes	3280	58		125TGRV	Snider, D
32	72M760	Rosebud	02N 39E 31 CBCD	10 04 72	Spring	8 gpm (M)	Stock use	3760	12	yes	3620			125TGRV	Sloan, S
33	73M650	Rosebud	02N 39E 32 DDDD	07 11 73	Well		Stock use	3990	12.5	yes	3520			125TGRV	Sloan, S
34	73M649	Rosebud	02N 39E 34 ADBB	07 10 73	Well	6 gpm (E)	Domestic use	2940		yes	3440	27		125TGRV	Pinkerton, W
35	73M648	Rosebud	02N 39E 34 DADB	07 10 73	Well	8 gpm (E)	Domestic and stock use	2050	16	yes	3470	26		125TGRV	Pinkerton, W.
36	73M663	Rosebud	02N 40E 06 CBCB	07 25 73	Well	7 gpm (E)	Stock use	2840	11	yes	3170	84		125TLCK	Dowlin, M.
37	72M761	Rosebud	02N 40E 18 DABD	10 06 72	Spring	3.2 gpm (M)	Stock use	3700	13	yes	3240			125TGRV	Dowlin, M.
38	73M654	Rosebud	02N 40E 30 BAAC	07 13 73	Well	12 gpm (E)	Stock use	3360	14	yes	3270	72		125TGRV	Dowlin, M.
39	73M13	Rosebud	02N 40E 31 DCCD	11 09 72	Well	6 gpm (M)		1740	13	yes	3530	114		125TGRV	Snider, D.
40	73M651	Rosebud	02N 40E 32 BBAB	07 21 73	Well		Domestic use	991		yes	3390			125TGRV	Hinrichs, W.
41	73M653	Rosebud	02N 40E 35 DDCD	07 13 73	Well	2 gpm (M)	Stock use	2670	11.5	yes	3420	146		125TGRV	Fadhl, G. J.
42	73M804	Rosebud	02N 41E 01 DBBA	08 30 73	Well		Stock use	878	11.5	yes	3150	61		125TGRV	Wimer, T.
43	73M10	Rosebud	02N 41E 02 DBBA	11 01 72	Well		Domestic use	3290		yes	3170		237	125TGRV	Wimer, T.
44	73M582	Rosebud	02N 41E 09 BCBC	07 24 73	Creek		Stock use	4230	23	yes	3100				
45	73M656	Rosebud	02N 41E 10 BCBC	07 18 73	Well	10 gpm (E)	Stock use	1790	13	yes	3170	100		125TGRV	Streeter, C.
46	74M17	Rosebud	02N 41E 17 ADAD	10 03 73	Spring		Stock use	2798	14	yes	3120			125TGRV	
47	73M12	Rosebud	02N 41E 21 CADA	11 09 72	Well	20 gpm (E)		3350	10	yes	3180	37		125TGRV	Seward, I.
48	75M0589	Rosebud	02N 41E 24 CAAA	06 11 75	Well	1.5 gpm (E)	Stock use	1371	10	yes	3450			125TGRV	
49	73M581	Rosebud	02N 41E 27 BCCC	09 13 73	Creek		Armells Creek	3790	23	yes	3200				
60	74M224	Rosebud	02N 41E 30 DDAA	10 02 73	Well	11 gpm (E)	Stock use	3076	13	yes	3360			125TGRV	
51	72M623	Rosebud	02N 41E 33 DDDD	08 12 72	Creek		Sarpy Creek	2220	20	yes	3240				
52	73M580	Rosebud	02N 41E 34 B	07 24 73	Creek		Armells Creek	2881	25.5	yes	3230				
53	72M622	Rosebud	02N 41E 34 BCCA	08 12 72	Creek		Sarpy Creek	3560	18	yes	3240				
54	73M745	Rosebud	02N 41E 35 DABD	09 25 73	Well		Rosebud mine spoil area research well	3770		yes	3250	20			
55	74M206	Rosebud	02N 41E 35 DABD	02 04 74	Well		Rosebud mine spoil area research well	3510		yes	3250	20			
56	74M205	Rosebud	02N 41E 35 DABD	02 04 74	Well		Rosebud mine spoil area research well	1786		yes	3250	27			
67	73M806	Rosebud	02N 42E 04 DACA	08 30 73	Well		Stock use	2058	11.6	yes	3010	60		125TGRV	Wimer, T.
68	73M805	Rosebud	02N 42E 05 CABB	08 30 73	Well		Stock use	2072	11	yes	3070	58		125TGRV	Wimer, T.
59	73M9	Rosebud	02N 42E 06 CBCD	11 01 72	Well	4 gpm (M)	Stock use	1680	12	yes	3140	88		125TGRV	Wimer, T.
60	72M759	Rosebud	02N 43E 12 AC	10 03 72	Spring	6 gpm (M)	Stock use	4390	12	yes	3020			125TGRV	Cornwell Land and Livestock Co.

HARDIN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
61	73MB31	Rosebud	02N 43E 12 CBAC	10 03 73	Well	0.3 gpm (E)	Stock use	3660	11	yes	3010				
62	75M0591	Rosebud	02N 43E 18 AAAC	06 12 76	Well	2 gpm (E)	Stock use	4841	11	yes	2890	60		125TGRV	Garfield Diamond Ranch
63	73MB28	Rosebud	02N 43E 20 CABB	10 02 73	Well		Stock use	1650	9.5	yes	2920				
64	73M3	Rosebud	02N 43E 27 CCBC	10 19 72	Well	6 gpm (M)	Stock use	2800	13	yes	2910	73		125TGRV	Garfield, G. M.
65	75M0590	Rosebud	02N 43E 30 BDDA	06 12 75	Well	2.5 gpm (M)	Stock use	1843	13	yes	2810			125TGRV	
66	73M3	Rosebud	02N 44E 21 DDDC	10 26 72	Well		Stock use	2030	11	yes	2920	3		125TGRV	
67	73M5	Rosebud	02N 44E 32 DAAC	10 20 72	Well		Stock use	4360	11	yes	2960	31		125TGRV	Garfield, G. M.
68	73MB13	Rosebud	02N 44E 33 DDAC	09 13 73	Well		Stock use	4766	12.6	yes	2890	14		125TGRV	Dodge, J
69	WQB1	Big Horn	01N 30E 35 BCA	09 15 76	Creek	0.5 cfs (E)	Fly Creek at Hay Creek	3690		no					
70	16M0017	Big Horn	01N 33E 16 AD	09 09 16	Well		Unused			yes	2850		190	211BRPW	
71	WQB4	Big Horn	01N 33E 27 ABB		Canal	25 cfs (E)		630		no					
72	16M0018	Big Horn	01N 33E 27 B	09 18 16	Well		Domestic use			yes	2850		12	110ALVM	
73	00M0026	Big Horn	01N 33E 28 CD		Well			5470	9	yes	2860				
74	WQB5	Big Horn	01N 33E 28 DDD	09 15 76	Pond	no flow		1100	17	yes					
75	00M0027	Big Horn	01N 33E 32 AB		Well			2010	8	yes	2960				
76	74M0121	Big Horn	01N 37E 06 ACAD	07 09 73	Well		Stock use	2074		yes	3480	30			Davidson
77	72M0394	Big Horn	01N 37E 13 CCAD	07 28 72	Spring	2 gpm (E)	Stock use	1450	10.6	yes	3430				Redding
78	73M0591	Big Horn	01N 37E 15 C	07 21 73	Creek		Sarpy Creek, stagnant pool	4950	3.3	yes	3270				
79	72M0395	Big Horn	01N 37E 24 CACC	07 29 72	Well		Unused	810	12	yes	3650	5			Redding
80	74M0118	Big Horn	01N 38E 22 CADD	06 28 73	Creek		Redding Creek	3426		yes	3400				
81	72M0423	Big Horn	01N 38E 22 CCCC	07 18 72	Well	10 gpm (E)	Domestic and stock use	1960	6	yes	3500				
82	72M0424	Big Horn	01N 38E 29 ADCA	07 21 72	Well	5 gpm (E)	Domestic use	818	13.6	yes	3480				
83	72M0425	Big Horn	01N 38E 29 ADCA	07 21 72	Well	4 gpm (E)	Domestic use	826	10	yes	3470				
84	72M0421	Big Horn	01N 38E 29 ADDA	07 31 72	Well		Stock use	1620	8	yes	3440				
85	72M0618	Big Horn	01N 38E 29 DBBB	08 11 72	Spring		Stock use	1340	20.5	yes	3460				Cox, Merle
86	72M0401	Big Horn	01N 38E 30 DADD	07 30 72	Spring		Unused	742		yes	3620				Orville, John
87	72M0399	Big Horn	01N 38E 30 DDAD	07 30 72	Well	0.6 gpm (E)		1360	7.4	yes	3510				Orville, John
88	72M0398	Big Horn	01N 38E 30 DDBD	07 30 72	Well	3 gpm (E)	Unused	657	9.2	yes	3630	23			Orville, John
89	73M647	Rosebud	01N 39E 06 CBB	07 06 73	Well	3 gpm (M)	Stock use	3140	12	yes	3680			125TGRV	Sloan, S.
90	73M660	Rosebud	01N 39E 22 DDDC	07 25 73	Spring	6 gpm (E)	Stock use	2160		yes	4000			125TGRV	Broadus, H

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91	73M658	Rosebud	01N 40E 02 BABD	07 24 73	Spring	0.6 gpm (M)	Stock use	2930	17	yes	3440			125TGRV	Fedhl, G
92	73M657	Rosebud	01N 40E 02 BCAB	07 19 73	Well	4.8 gpm (M)	Domestic use	483	8	yes	3510	34		125TGRV	Fadhl, G.
93	74M0225	Rosebud	01N 40E 02 CDCC	10 02 73	Well		Stock use	1258	11	yes	3510	42	100	125TGRV	
94	73M11	Rosebud	01N 40E 12 CBBA	11 02 72	Well	20 gpm (E)	Stock use	1660	10.5	yes	3400			125TGRV	Farley, B.
95	75M0314	Rosebud	01N 40E 13 CCDC	04 14 75	Well	4.3 gpm (M)	Unused	2943	13.5	yes	3480	103	195	125FRUN	
96	75M0417	Rosebud	01N 40E 13 CCDC	05 29 75	Well	0.5 gpm (M)	Unused	2326	13	yes	3480	108	149	125FRUN	
87	74M0213	Rosebud	01N 40E 14 BBBB	10 03 73	Well	50 gpm (E)	Domestic use	1344		yes	3440	20		125TGRV	
98	74M212	Rosebud	01N 40E 14 BBBB	10 03 73	Well	60 gpm (E)	Stock use	1542	10	yes	3440	20		125TGRV	
99	73M589	Rosebud	01N 40E 15 BACB	07 25 73	Creek		Stock use	3130	25	yes	3460				
100	75M0309	Rosebud	01N 40E 15 BBDA	05 18 75	Well		Unused	3113	6	yes	3480	10		125FRUN	
101	75M0308	Rosebud	01N 40E 15 BDBB	05 16 75	Well		Unused	2179	7	yes	3500	18	47	125FRUN	
102	75M0307	Rosebud	01N 40E 15 BDBD	05 16 75	Well		Unused	1305	8	yes	3490	22	60	125FRUN	
103	73M742	Rosebud	01N 41E 01 ACAB	09 25 73	Well		Unused	2350		yes	3200	36			
104	73M743	Rosebud	01N 41E 01 DDAC	09 25 73	Well		Unused	3140		yes	3240	23			
105	73M588	Rosebud	01N 41E 03 BBBB	07 25 73	Creek		Armells Creek	2770	23	yes	3220				
106	73M669	Rosebud	01N 41E 03 CDDD	08 20 73	Well	3 gpm (M)	Stock use	1240	11.5	yes	3330	66		125TGRV	Snider, J
107	75M0306	Rosebud	01N 41E 04 AABB	05 16 75	Well		Unused	2637	9.5	yes	3260	21	50	125FRUN	
108	74M215	Rosebud	01N 41E 07 DBBA	10 03 73	Well	6 gpm (E)	Stock use	1160	11	yes	3360		125	125TGRV	
109	75M0315	Rosebud	01N 41E 10 AACD	05 16 75	Well	12.5 gpm (M)	Unused	2493	11	yes	3340	84	130	125FRUN	
110	75M0418	Rosebud	01N 41E 10 AACD	05 28 75	Well	0.2 gpm (M)	Unused	2930	10	yes	3340	110	149	125FRUN	
111	73M749	Rosebud	01N 41E 12 ADDD	09 25 73	Well		Unused	1300		yes	3320	37			
112	73M667	Rosebud	01N 41E 12 CBDB	08 02 73	Well	2.3 gpm (M)	Stock use	2540	15.5	yes	3010	22		125TGRV	McRae, D.
113	73M655	Rosebud	01N 41E 13 CDCD	07 18 73	Well	8 gpm (E)	Used for watering grass	2110	18	yes	3290	107		125TGRV	Snider, J. W
114	75M0313	Rosebud	01N 41E 18 BAB	05 13 75	Well	2.4 gpm (M)	Unused	1234	13.5	yes	3410	101	225	125FRUN	
115	73M803	Rosebud	01N 41E 23 BCDC	08 09 73	Well		Industrial use	2544	19	yes	3230	45			Peabody Coal Co.
116	74M208	Rosebud	01N 41E 27 AADB	02 04 74	Well		Unused	3800		yes	3220				
117	74M209	Rosebud	01N 41E 27 AADD	02 04 74	Well		Unused	7242		yes	3220				
118	74M207	Rosebud	01N 41E 27 DAAC	02 04 74	Well		Unused	3948		yes	3240	47			
119	74M203	Rosebud	01N 42E 07 CBA	02 04 74	Well		Unused	4980		yes	3250	25			
120	73M2	Rosebud	01N 42E 10 CCDC	10 18 72	Well	15 gpm (E)	Stock	3160	10.6	yes	3080	19		125TGRV	Kluver, E. M.

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Specific Conductivity Inventory Sheet (Con't.)

Map ref. no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 26°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
121	74M201	Rosebud	01N 42E 17 BDDC	02 04 74	Well		Unused	2173		yes	3050	37			
122	73M740	Rosebud	01N 42E 18 AAAB	09 25 73	Well		Unused	2920		yes	3280	41			
123	74M200	Rosebud	01N 42E 18 AAAB	02 04 74	Well		Unused	2720		yes	3040	41			
124	73M668	Rosebud	01N 42E 19 DBBA	08 02 73	Well	8 gpm (E)	Stock use	1510	11	yes	3130	21		126TGRV	McRae, D
125	73M794	Rosebud	01N 42E 22 CABD	09 06 73	Well		Stock use	4696	11	yes	3060			125TGRV	Curran, J
126	73M802	Rosebud	01N 42E 25 BCDD	09 08 73	Well		Domestic use	4000		yes	2930	14		126TGRV	Curran, J.
127	73M801	Rosebud	01N 42E 28 BDDC	08 09 73	Well		Stock use	1906	10	yes	2990	17		125TGRV	McRae, W.
128	72M755	Rosebud	01N 42E 33 ADBC	09 28 72	Well	13.3 gpm (M)	Stock use	3490	10	yes	2970	21		126TGRV	McRae, W.
129	73M60	Rosebud	01N 42E 34 ACAB	02 01 73	Well		Domestic use	2420		yes	2960	8		126TGRV	McRae, W.
130	73M1	Rosebud	01N 43E 17 AACA	10 18 72	Well	4 gpm (M)	Stock use	2050	10.5	yes	2900	39		125TGRV	Kluver, E M
131	73M824	Rosebud	01N 43E 33 BBBB	10 01 73	Well		Stock use	1410	10.6	yes	2980	19	78	110ALVM	McRae, W. D.
132	75M0592	Rosebud	01N 44E 04 DABD	06 13 75	Well	0.1 gpm (E)	Stock use	6436	12	yes	2890	22		126TGRV	
133	73M15	Rosebud	01N 44E 07 AADA	11 29 72	Well		Stock use	4530	11	yes	2960	46		126TGRV	Garfield, G. M
134	73M808	Rosebud	01N 44E 12 CBCA	09 12 73	Well		Domestic use	1998	16	yes	2760			125TLCK	Dodge, J.
135	73M814	Rosebud	01N 44E 14 BBDC	09 25 73	Well		Domestic use	1994	14.5	yes	2730			125TLCK	Hart Ranch
136	73M810	Rosebud	01N 44E 29 ACBD	09 13 73	Well		Stock use	1946	11	yes	2900	3		125TGRV	Dodge, J.
137	73M812	Rosebud	01N 44E 30 BDCA	09 13 73	Well		Stock use	4400	19.6	yes	2950			110ALVM	Dodge, J
138	73M811	Rosebud	01N 44E 31 AABA	09 13 73	Well		Stock use	1552	13	yes	3030	3		126TGRV	Dodge, J.
139	72M757	Rosebud	01N 44E 34 DCCB	09 29 72	Well		Stock use	2830	11.6	yes	2810			126TGRV	O'Brian, L.
140	WQB15	Big Horn	01S 31E 14 ABD	09 16 76	Seep	no flow		72200	17	yes					
141	WQB16	Big Horn	01S 31E 16 DA	09 16 76	Pond		Near 100 acre seep	14740	23	yes					
142	00M0028	Big Horn	01S 32E 23 BD		Well			3040		yes	3060				
143	WQB2	Big Horn	01S 33E 02 DDB	09 16 76	Ditch	no flow	Irrigation ditch seep	4710	20	yes					
144	WQB3	Big Horn	01S 33E 03 CAB	09 16 76	Canal	30 cfs (E)	Leggins Canal	690		no					
145	37M0003	Big Horn	01S 33E 13 DD	11 23 37	Well					yes	3000			331MDSN	
146	00M0028	Big Horn	01S 33E 14 AB		Well			6590	8	yes	2890				
147	00M0030	Big Horn	01S 33E 14 DB		Well			5830	10	yes	2890				
148	00M0031	Big Horn	01S 33E 16 DD		Well			3380	7	yes	2910				
149	WQB21	Big Horn	01S 33E 18 B	11 18 76	Seep	26 gpm (E)	About 10 acres in size	6400		no					
150	WQB14	Big Horn	01S 33E 18 BDD	09 16 76	Seep	no flow		89970	29	yes					

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Specific Conductivity Inventory Sheet (Con't.)

Map rel. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
151	WQB1B	Big Horn	01S 33E 18 C	11 17 75	Seep			6300		no					
152	00M0032	Big Horn	01S 33E 18 DA		Well			1600		yes	3040				
153	00M0033	Big Horn	01S 33E 19 DA		Well			1200		yes	3040				
154	00M0034	Big Horn	01S 33E 24 BC		Well			7010	11	yes	2900				
155	00M0036	Big Horn	01S 33E 26 CB		Well			2190	11	yes	2810				
156	21M0104	Big Horn	01S 33E 27 D	10 20 21	Well					yes	2920	35	37	110ALVM	
157	21M0105	Big Horn	01S 33E 30 A	10 10 21	Well					yes	3040	15	18	110TRRC	
158	74M0037	Big Horn	01S 37E 01 BAAC	09 11 73	Well		Unused	2380	11	yes	3490	55		125TGRV	Peters, Joe
159	74M0116	Big Horn	01S 37E 01 BAAD	09 11 73	Well		Stock use		11	yes	3500			125TGRV	Peters
160	74M0105	Big Horn	01S 38E 03 CACC	06 27 73	Well		Stock use	678	12	yes	3650				Cox
161	72M0420	Big Horn	01S 38E 09 ACBB	07 18 72	Well	3 gpm (E)	Stock use	1060	8.2	yes	3520				Crum
162	72M0419	Big Horn	01S 38E 09 BADD	07 18 72	Well	20 gpm (M)	Domestic use	1230	10	yes	3510				Crum
163	72M0403	Big Horn	01S 38E 09 BDDA	08 01 72	Well	3 gpm (E)	Stock use	1780	10	yes	3508	0.6			Crum
164	72M0404	Big Horn	01S 38E 09 CAAA	08 01 72	Well	3 gpm (E)	Stock use	1370	11	yes	3520	1.7			Crum
165	73M799	Rosebud	01S 39E 12 DCBA	09 12 73	Spring	1 gpm (E)	Stock use	1834	13	yes	3770			125TGRV	
166	73M797	Rosebud	01S 40E 06 BBDB	09 12 73	Spring	0.25 gpm (E)	Stock use	1424	11	yes	3890			110ALVM	Bailey, D.
167	73M798	Rosebud	01S 40E 07 DADA	09 12 73	Well		Stock use	2906	13	yes	3580			125TGRV	
168	73M796	Rosebud	01S 40E 08 AAAC	09 12 73	Spring	2 gpm (M)	Stock use	2226	12.5	yes	3600			110ALVM	Bailey, D.
169	73M795	Rosebud	01S 41E 02 AABB	09 07 73	Well		Stock use	2348		yes	3150	38		125TGRV	Bailey, J.
170	73M18	Rosebud	01S 41E 17 DAAA	12 01 72	Well		Stock use	2420	10.5	yes	3170	24		125TGRV	Golder, J.
171	76M0119	Powder River	01S 41E 23 BACB	02 27 76	Well		Domestic use	1820	12.5	yes	3070	21	248	125TGRV	
172	73M8	Rosebud	01S 41E 32 CABA	10 27 72	Well	7.5 gpm (M)	Stock use	3220	12	yes	3160	60		125TGRV	Golder, J.
173	73M7	Rosebud	01S 41E 33 DBCB	10 27 72	Well		Domestic use	1870		yes	3120	16		125TGRV	Golder, J.
174	73M665	Rosebud	01S 42E 04 DCAB	08 01 73	Well	3 gpm (M)	Used for watering grass	4820	11.5	yes	3010	27		125TGRV	McRae, D.
175	73M666	Rosebud	01S 42E 04 DCA	08 01 73	Well			3970	13	yes	3010	22		125TGRV	McRee, D.
176	73M1B	Rosebud	01S 43E 11 CACB	11 29 72	Well		Stock use	1740	9.5	yes	3110	24		125TGRV	McRee, W. D.
177	72M756	Rosebud	01S 44E 08 DCAD	09 28 72	Well		Stock use	2060	11	yes	2920	34		125TGRV	McRae, W. D
178	21M0106	Big Horn	02S 32E 26 A	10 11 21	Well		Domestic use			yes	3080	16	21	110TRRC	
179	WQB12	Big Horn	02S 34E 08 BCC	09 18 76	Pond		Near seep arae	6330	22	yes					
180	72M754	Rosebud	02S 41E 02 BABA	08 28 72	Spring	4 gpm (M)	Stock use	377	8	yes	3360			125TGRV	McRae, D.

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Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
181	73M17	Rosebud	02S 41E 02 DABC	11 30 72	Well		Stock use	4800	11.5	yes	3430	138		126TGRV	McRae, D
182	72M753	Rosebud	02S 44E 12 BCCA	09 21 72	Spring	4 gpm (M)	Stock use	1190	11.5	yes	3000			125TGRV	Owen, J. F
183	72M752	Rosebud	02S 44E 14 CB	09 21 72	Spring	1 gpm (M)	Stock use	1020	12	yes	3000			125TGRV	Owen, J. F
184	69M0006	Big Horn	03S 31E 21 AC	12 31 69	Well					yes	3240			217LKOT	
185	55M0005	Big Horn	03S 31E 34 BC	06 18 55	Well			3106		yes	3490			331MDSN	
186	WQ810	Big Horn	03S 32E 27 AAC	09 16 76	Creek	0.1 cfs (E)	Woody Creek at bridge	6454	22	yes					
187	00M0036	Big Horn	03S 33E 08 BD		Well			7620	11	yes	3000				
188	00M0037	Big Horn	03S 35E 18 DC		Well					yes	3100				
189	78M0002	Big Horn	03S 35E 18 DCB	06 28 77	Well	75 gpm (M)	Custer Battlefield Well, unused	2667	10	yes	3080	10	123		
190	78M0003	Big Horn	03S 35E 18 DCDB	06 28 77	River		Little Big Horn River	618	28	yes	3060				
191	WQ813	Big Horn	03S 35E 30 ADD	09 16 76	Pond			1545		no					
192	75M0194	Rosebud	03S 44E 11 BCAD	04 29 75	Well	30 gpm (M)	Domestic use	1610	11	yes	2940				
193	75M0603	Rosebud	03S 44E 33 BDAA	06 05 75	Well	12 gpm (M)	Stock use	1318	12.5	yes	2980	6	300		
184	76M0114	Powder River	03S 45E 32 DDA	02 26 76	Well		Domestic use	1390		yes	3010		372	125TGRV	Shy
185	00M0038	Big Horn	04S 32E 02 AA		Well			6670	13	yes	3180				
196	WQ811	Big Horn	04S 32E 16 DBB	09 16 76	Creek	1 cfs (E)	Beauvais Creek	2535	23	yes					
197	00M0016	Big Horn	04S 32E 23 DC		Well			2720	12	yes	3060				
198	21M0107	Big Horn	04S 32E 23 DC	10 18 21	Well					yes	3060	36	45	110ALVM	
199	00M0017	Big Horn	04S 32E 26 BD		Well			3780	10	yes	3060				
200	00M0018	Big Horn	04S 32E 36 BD		Well			2130	10.6	yes	3100				
201	00M0019	Big Horn	04S 32E 36 BD		Well			2690	11.5	yes	3100				
202	WQ85	Powder River	04S 45E 04 BDA	10 18 76	Creek	2 cfs (E)	Otter Creek	2689		yes					
203	00M0020	Big Horn	05S 31E 35 CC		Well			825	20	yes	3140				
204	00M0021	Big Horn	05S 31E 36 DB		Well			1180	9	yes	3160				
205	00M0022	Big Horn	05S 32E 11 BB		Well			6030	10	yes	3160				
206	00M0023	Big Horn	06S 32E 20 BA		Well			1640	9	yes	3120				
207	75M0192	Rosebud	06S 43E 16 DDCC	05 01 75	Creek	0.5 gpm (M)	Stock use	817	13	yes	3360				
208	67M0005	Big Horn	06S 32E 27 CD	10 06 67	Well	290 gpm (E)				yes	3620			331MDSN	Imperial Minerals Inc.
209	61M0001	Big Horn	06S 32E 34 ABB	08 07 61	Well	2 gpm (E)				yes	3640			320AMSD	
210	61M0003	Big Horn	06S 32E 34 ACC	08 08 61	Well					yes	3440			331MDSN	

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211	WQB19	Big Horn	06S 34E 13	11 18 75	Creek	25 gpm (E)	South Fork Good Luck Creek	4330		yes					
212	WQB20	Big Horn	06S 34E 13	11 18 76	Creek	25 gpm (E)	North Fork Good Luck Creek	3250		no					
213	72M239	Rosebud	06S 43E 19 DD	06 01 72	Creek	0.1 cfs (M)	Hanging Woman Creek	2845	24 6	yes	3180				
214	75M0191	Rosebud	06S 43E 25 AADB	05 01 75	Creek	3.93 gpm (M)	One mile NE of landing area	925	6	yes	3500				
215	64M0026	Powder River	08S 46E 11 AA	06 16 64	Well			1647		yes	3900			337M5NC	
216	72M0147	Big Horn	09S 40E 15 DCB	05 27 72	Ditch	2 cfs (E)	Unused	2670		yes	3430				
217	72M0252	Big Horn	09S 40E 16 ABCA	06 21 72	Well		Unused	2020		yes	3500	45		125FRUN	
218	72M0258	Big Horn	09S 40E 16 ABCA	06 21 72	Well		Unused	1850		yes	3500	46		125FRUN	
219	72M0262	Big Horn	09S 40E 16 ABCA	06 22 72	Well		Unused	1920		yes	3500	46	135	125FRUN	
220	72M0253	Big Horn	09S 40E 18 ABCD	06 21 72	Well	8.1 gpm (M)	Unused	2520		yes	3500	60	207	125FRUN	
221	72M0254	Big Horn	09S 40E 18 ABCD	06 21 72	Well		Unused	1630		yes	3490	61	135	125FRUN	
222	72M0225	Big Horn	09S 40E 16 ABCD	06 21 72	Well	7.7 gpm (M)	Unused	1480	14.3	yes	3490	41	207	125FRUN	
223	72M0257	Big Horn	09S 40E 16 ABCD	06 21 72	Well		Unused	1660	12.5	yes	3490	81	135	126FRUN	
224	72M0259	Big Horn	09S 40E 16 ABCD	06 21 72	Well		Unused	2520		yes	3500	60		125FRUN	
226	72M0260	Big Horn	09S 40E 18 ABCD	06 22 72	Well		Unused	1620	12.5	yes	3490	60	135	125FRUN	
226	72M0261	Big Horn	09S 40E 18 ABCD	06 22 72	Well		Unused	2610		yes	3500	60	135	126FRUN	
227	72M0264	Big Horn	09S 40E 16 ABCD	06 22 72	Well		Unused	1590		yes	3490	60	135	126FRUN	
228	72M0397	Big Horn	09S 40E 22 DBAD	07 27 72	River		Tongue River at Decker Bridge	669	24	yes	3440				
229	72M0396	Big Horn	09S 40E 29 CCAD	07 27 72	Well		Domestic use	1740	10.9	yes	3520				
230	WQ817	Big Horn	09S 41E 10 CC	06 10 76	Creek	no flow	Deer Creek	6350		yes					
231	72M0235	Big Horn	09S 44E 2	06 01 72	Reservoir		Stock reservoir	1380	20.5	yes	3900				

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
3	03N	37E	26	DACD	06	27	73	Well	7.9	20	109.5	2.6				237	43	6.2	55
4	03N	37E	35	CDB	06	25	73	Well	4.4	1.6	378	1.7			7.9	534	15	8.9	344
5	03N	37E	36	CDDA	09	03	73	Spring	40	40.8	28.8	1.4			1.6	190	82	30	1938
6	03N	39E	36	BACD	07	26	73	Well	4.4	.5	378	2	.01		8.6	785	19	42	99
7	03N	41E	28	CCDD	07	24	73	Creek	284	549	838	16.4	.14	3.08	16.1	616		36	4100
8	02N	33E	10	DD	10	17	21	Well	73	50	372	5.6	.07		25	521		20	725
9	02N	33E	15	B8	10	17	14	Well	33	22					48	654		12	527
11	02N	33E	35	CD				Well	175	59	304	6.1	.42		24	432		31	933
13	02N	37E	01	ADBA				Spring	57	119	63	4.8			12.5	327		6.4	463
14	02N	37E	08	ADDC	06	25	73	Well	22	46	491	6.3			9.6	471	19	22	850
15	02N	37E	20	ABDB	06	26	73	Well	6.4	3.8	704	3.1			7.6	805	34	13.8	782
16	02N	38E	07	DCCC				Well	58	108	97.8	4.8			10.7	358		5.1	482
17	02N	38E	08	ACDA	07	03	73	Spring	18.8	74	281	8.3	.01	.01	9.7	290	36	7.0	655
18	02N	38E	16	ADAC	03	15	74	Spring	110	218	127.5	7.1			10.5	520		14.7	1004
19	02N	38E	18	ABBB	06	26	73	Well	89	131	97	5.3		.01	11.8	417		12.0	557
20	02N	38E	19	ACDA	07		73	Spring	434	403	357	33		.01	14.6	366		4.6	3060
21	02N	38E	20	8DAC	07		73	Well	11.1	57	525	6.5			1.7	365	18	7.7	1062
22	02N	38E	22	BBAB	07	22	73	Well	25	126	64	4.3			15.7	405		4.7	385
23	02N	38E	30	AABD	07	09	73	Spring	36	45	11.2	1.2			14.9	296		1.9	53
24	02N	38E	30	BCCC	10	05	73	Spring	24	64	27	2.7			12.7	302	14	4.8	80
25	02N	38E	32	A8D8	07	10	73	Well	184	248	222.5	8.4		.10	12.7	727		8.2	1317
26	02N	39E	05	BCBD	09	13	73	Well	54	108	317.5	5.9		.06	9.5	323		7.5	980
27	02N	39E	05	DDDC	09	13	73	Well	249	553	905	13.2	.01	.06	10.7	703		27	4184
28	02N	39E	12	CCCB	11	10	72	Well	2.4	.8	330	1	.09	.01	11	739	15	30	42
29	02N	39E	23	CAAB	07	26	73	Well	51	97	108.4	5.7	.01	.15	14	523		4.3	330
30	02N	39E	24	CDAB	07	25	73	Well	144	162	450	7.9	.02		9.6	508		9.8	1552
31	02N	39E	25	ACDC	07	12	73	Well	277	464	552	10.9	.04	.02	6.8	673		22	3130
32	02N	39E	31	C8CD	10	04	72	Spring	196	387	330	13	.05	.02	18	571		11.7	2232
33	02N	39E	32	DDDD	07	11	73	Well	204	306	310	10.6	.14	.2	19	514		10.5	1945
34	02N	39E	34	ADBB	07	10	73	Well	157	327	179	8.5	.02	.05	11	721		11.5	1482
35	02N	39E	34	DADB	07	10	73	Well	169	180	92	5.3	.93	.13	14	484		7.3	960
36	02N	40E	06	CBC8	07	25	73	Well	22	13.5	694	3.4	.08	.03	8.6	507	14	12.2	1134
37	02N	40E	18	DABD	10	06	72	Spring	115	304	478	15	.12	.01	11	734		18.6	1884
38	02N	40E	30	BAAC	07	13	73	Well	77	108	662	5.9	4.3	.09	7.5	449		12.3	1656
39	02N	40E	31	DCCD	11	09	72	Well	162	136	78	4.5	.51	.05	22	479		7.8	703
40	02N	40E	32	88AB	07	21	73	Well	83	86	24.3	2.4	.16	.02	11	483		3.1	209
41	02N	40E	35	DDCD	07	13	73	Well	256	215	170	6.2	.83	.43	14	781		9.9	1216
42	02N	41E	01	OBBA	08	30	73	Well	31	92	27.6	3.7		.03	11.5	220	19	5.5	274
43	02N	41E	02	OBBA	11	01	72	Well	218	109	512	8.7	3.0	.10	10	376		9.9	1736
44	02N	41E	09	BC8C	07	24	73	Creek	162	395	471	26.6	.06	.02	1.1	282	29	56	2615
45	02N	41E	10	BC8C	07	19	73	Well	169	98	55	6.3	.50	.03	11	363		6.5	620
46	02N	41E	17	ADAD	10	03	73	Spring	169	250	218	24		.01	15.7	529	19	21	1368
47	02N	41E	21	CADA	11	09	72	Well	172	173	486	8.5	1.50	.10	14	544		12.9	1680
48	02N	41E	24	CAAA	06	11	75	Well	129	91	23.7	4	.02	.03	15.3	702		3.6	177
49	02N	41E	27	8CCC	09	13	73	Creek	228	378	310	16	.05	.02	3	460		43	2280

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
3	3.6	.4	9.04	12	638	376	105	338	4.7	MBMG			No	74M109
4	203	1.2	8.63	1.2	1530	1027	18	487	39.0	MBMG			No	73M600
5	.384	.1	8.97	29	3330	2258	1810	429	3.0	MBMG		125TGRV	No	74M0029
6	.045	4.0	8.34	13.5	1390	944	13	708	45.6	USGS	235	125TLCK	No	73M661
7		.2	8.18	19.5	6170	8146	3000	505	6.7	MBMG			Yes	73M583
8		.6	7.40	11	2160	1528	388	427	8.2	USGS	202	211HLCK	No	21M0103
9							173	536		USGS	81	211HLCK	No	14M0003
11		.7	7.20	14	2320	1746	680	354	5.1	USGS			No	00M0024
13	1.355		8.06	13.5	1230	888	693	268	1.1	MBMG			No	73M0596
14	3.0	1.5	8.73	10.5	2530	1702	244	451	13.7	MBMG		125TGRV	No	74M20
15	.068	1.3	8.73	1.1	2640	1953	32	773	54.5	MBMG			No	73M0601
16	.858	.1	8.00	10	1270	946	594	292	1.8	MBMG		125TGRV	No	73M598
17	1.1	.1	8.78	21	1750	1232	350	358	6.6	MBMG		125TGRV	No	74M125
18		.2	8.02	23	2274	1748	1180	426	1.6	MBMG		125TGRV	No	74M120
19	21.3	.2	8.17	9	1522	1130	768	342	1.5	MBMG		125TGRV	No	74M21
20	.023	.3	7.77		4440	4487	2750	300	3.0	MBMG		125TGRV	No	73M597
21		.1	8.49	10	2600	1870	268	358	14.1	MBMG		125TGRV	No	74M0030
22	3.1	.1	8.27	10	1232	827	590	332	1.2	MBMG			No	74M119
23	.7	.2	8.12	18		309	275	242	.3	MBMG			No	74M124
24	14.4	.2	8.61	11		393	330	295	.7	MBMG		125TGRV	No	74M0220
25	3.3		7.64	13.0	2890	2362	1490	597	2.5	MBMG		125TGRV	No	74M221
26	.271	5.9	8.29	11	2210	1648	585	265	5.7	USGS		125TGRV	No	73M807
27			7.95	13.5	6638	6288	2940	576	7.3	USGS		110ALVM	No	73M800
28	.068	4.2	8.55	13.5	1250	801	9	658	46.8	MBMG		125TGRV	No	73M14
29	.406	.2	7.98	27	1240	869	534	429	2.1	USGS		125TGRV	No	73M662
30	.045	3	8.10		3030	2588	1040	417	6.1	USGS	140	125TGRV	No	73M664
31	.067	4	7.83		5060	4797	2630	552	4.7	USGS		125TGRV	No	73M652
32	.768	.3	7.85	12	3760	3470	2110	468	3.1	USGS		125TGRV	No	72M760
33	.768	.3	8.03	12.5	3990	3060	1780	422	3.2	USGS		125TGRV	No	73M650
34	.225	.2	7.93		2940	2532	1760	592	1.9	USGS		125TGRV	No	73M649
35	.113	.1	7.89	16	2050	1657	1170	397	1.2	USGS		125TGRV	No	73M648
36	.090	.5	8.39	11	2840	2152	110	464	28.8	USGS		125TLCK	No	73M663
37	.068	.1	8.02	13	3700	3188	1560	602	5.3	USGS		125TGRV	No	72M761
38	.045	.5	8.06	14	3360	2755	640	369	11.4	USGS		125TGRV	No	73M654
39		.1	7.63	13	1740	1350	968	393	1.1	USGS		125TGRV	No	73M13
40	.067	.3	7.93		991	657	566	396	.4	USGS		125TGRV	No	73M651
41	.225	.3	7.87	11.5	2670	2274	1530	641	1.9	USGS		125TGRV	No	73M653
42	2.056		8.60	11.5	878	575	462	244	.6	USGS		125TGRV	No	73M804
43	.023	.3	8.02		3290	2792	994	309	7.1	USGS	237	125TGRV	No	73M10
44	.271	.7		23	4230	3896	2060	327	4.5	MBMG			Yes	73M582
45	1.581	.2	7.88	13	1790	1147	826	298	.8	USGS		125TGRV	No	73M656
46	2.869	.3	8.49	14	2798	2348	1450	466	2.5	MBMG		125TGRV	No	74M17
47	.023	.5	7.96	10	3350	2816	1150	446	6.3	USGS		125TGRV	No	73M12
48	.16	.3	7.49	10	1371	790	700	576	.4	USGS		125TGRV	No	75M0588
49	.136	.4	8.21	23	3790	3485	2150	377	2.9	MBMG			Yes	73M581

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
50	02N	41E	30	DDAA	10	02	73	Well	316	247	149.5	20	.03	.01		350		22	1767
51	02N	41E	33	DDDD	08	12	72	Creek	110	218	145	13	.03	.01	20	342		12.5	1150
52	02N	41E	34	B	07	24	73	Creek	136	308	211	9.9	.16	.09	10.3	472		13	1612
53	02N	41E	34	BCCA	08	12	72	Creek	335	319	286	5.6	.04	.01	25	499		29	2208
54	02N	41E	35	DABD	09	25	73	Well	467	351	114	9			16	483		15.9	2418
55	02N	41E	35	DABD	02	04	74	Well	421	306	118.8	9.9			17.3	333		14.3	2166
56	02N	41E	35	DABD	02	04	74	Well	139	104	156	8.9			15.3	542		5.9	652
57	02N	42E	04	DACA	08	30	73	Well	28	35	412.5	6.7	1.51		11.3	273	15	8.8	832
58	02N	42E	05	CABB	08	30	73	Well	117	206	106.8	7.7		.02	16	220		9.5	1136
59	02N	42E	06	CBCD	11	01	72	Well	107	161	77	5.2	1.45	.30	17	429		6.0	718
60	02N	43E	12	AC	10	03	72	Spring	286	422	398	17.5	.06	.02	20	556		11.7	2750
61	02N	43E	12	CBAC	10	03	73	Well	236	345	312	17.2	.02	.02	18.3	501		11.4	2236
.62	02N	43E	18	AAAC	06	12	75	Well	91	57	890	5.9	.04	.06	6.4	634		49	1766
63	02N	43E	20	CABB	10	02	73	Well	54	41	290	6.1		.02	9.6	336		3.8	623
64	02N	43E	27	CCBC	10	19	72	Well	133	123	390	6.2	.15	.06	10	387		34	1247
65	02N	43E	30	BDDA	06	12	75	Well	2.7	.7	399	1.8			7.5	839		147	1
66	02N	44E	21	DDDC	10	26	72	Well	312	33	173	4.2	1.2	.08	16	349		12.5	957
67	02N	44E	32	DAAC	10	20	72	Well	79	47	950	4.7	.79	.06	10	669		23	1800
68	02N	44E	33	DDAC	09	13	73	Well	42	16.4	1140	6.4		.04	7.5	567		21	2092
70	01N	33E	16	AD	09	09	16	Well	62	18	1706*				18	396		2480	105
72	01N	33E	27	B	09	18	16	Well	183	23	72*		2.4		22	317		28	392
73	01N	33E	28	CD				Well	190	101	1060	18	.17		25	338		136	2700
74	01N	33E	28	DDD	09	15	76	Pond	55	22.6	140	13				144		10.5	400
75	01N	33E	32	AB				Well	188	81	193	4.1	.12		21	347		21	900
76	01N	37E	06	ACAD	07	09	73	Well	4.4	188	227	6	.01		12.1	383	76	6.5	830
77	01N	37E	13	CCAD	07	29	72	Spring	138	95	62	14.5	.05	.01	24.1	222		6.9	650
78	01N	37E	16	C	07	21	73		78.8	515	644	29.6	.02	.02	17.2	1288	139	26	2242
79	01N	37E	24	CACC	07	29	72	Well	65	66	22	1.8			11	444		7.1	97
80	01N	38E	22	CADD	06	29	73	Creek	105	276	395	11.9	.02	.01	15.4	579		5.8	1736
81	01N	38E	22	CCCC	07	18	72	Well	81	106	235	4.8	3.08	.39	8	439		10.7	767
82	01N	38E	29	ADCA	07	21	72	Well	57	70	21.8	2.9	.05	.10	10	431		7.8	120
83	01N	38E	29	ADCA	07	21	72	Well	50	88	26	2.7	.67	.04	11	395		32	160
84	01N	38E	29	ADDA	07	31	72	Well	·80	146	81	3		.01	9	486		10.3	540
85	01N	38E	29	DBBB	08	11	72	Spring	75	138	48	10.1	.03	.01	4.8	668		11.1	291
86	01N	38E	30	DADD	07	30	72	Spring	24	73	49	2.7		.02	11	444	10	1.7	76
87	01N	38E	30	DDAD	07	30	72	Well	55	130	51	2.6			11	272		69	273
88	01N	38E	30	DDBD	07	30	72	Well	25	68	23	2.3			11	357		3.7	86
89	01N	39E	05	CCB	07	05	73	Well	20	8.2	745	4.1	.08	.03	6.4	258		12.6	1402
90	01N	39E	22	DDDC	07	25	73	Spring	121	249	76.4	12.6	.02	.01	15	685		5.5	918
91	01N	40E	02	BABD	07	24	73	Spring	380	270	65.4	10.5	.04	.02	19	352		13.2	1852
92	01N	40E	02	BCAB	07	19	73	Well	46	34	5.5	1.9	.02	.01	11	234		7.0	58
93	01N	40E	02	CDCC	10	02	73	Well	110	107	36.8	3.9			12.8	376		3.7	463
94	01N	40E	12	CBBA	11	02	72	Well	105	160	78	5.8	.08	.01	29	447		4.6	690
95	01N	40E	13	CCDC	04	14	75	Well	265	277	138	7.9	..02	.02	19.4	673		6.5	1474
96	01N	40E	13	CCDC	05	29	75	Well	243	202	76	7.4	.02	.14	15.5	501		6.7	1037

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters (Con't.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
50	.858	.3	7.66	13	3076	2695	1810	287	1.5	M8MG		125TGRV	No	74M224
51	.271	.2	8.09	20	2220	1838	1180	280	1.8	M8MG			No	72M623
52	.067	.2	8.23	25.5	2881	2533	1630	387	2.3	M8MG			Yes	73M580
53	4.292	.2	7.88	18	3560	3458	2160	409	2.7	M8MG			No	72M822
54	2.259		7.87		3770	3632	2620	396	1.0	M8MG			No	73M745
55	2.259		7.69		3510	3220	2320	273	1.1	M8MG			No	74M206
56	.068		7.84		1786	1348	776	445	2.4	M8MG			No	74M205
57	.067		8.45	11.5	2058	1485	217	274	12.2	M8MG		125TGRV	No	73M806
58	.067	.1	8.29	11	2072	1708	1150	180	1.4	USGS		125TGRV	No	73M805
59	.158		7.69	12	1680	1304	938	352	1.1	USGS		125TGRV	No	73M9
60	2.485	.3	7.79	12	4390	4182	2470	456	3.5	USGS		125TGRV	No	72M759
61	.746	.1	7.73	11	3660	3424	2030	411	3.0	USGS			No	73M831
62	3.61	.9	7.83	11	4841	3181	464	520	18.0	USGS		125TGRV	No	75M0591
63	1.107	.1	7.87	9.5	1650	1194	304	278	7.2	USGS			No	73M828
64	2.937	.4		13	2800	2142	841	326	5.9	USGS		125TGRV	No	73M3
65	.32	3.8	8.25	13	1843	977	10	689	56.0	USGS		125TGRV	No	75M0590
66	.068	.6	7.80	11	2030	1682	900	286	2.5	USGS		125TGRV	No	73M3
67	.090	.4	7.82	11	4360	3245	391	548	20.9	USGS		125TGRV	No	73M5
68	1.784	.3	8.26	12.5	4766	3607	173	465	37.7	USGS		125TGRV	No	73M813
70							229	325		USGS	190	211BRPW	No	18M0017
72							552	260		USGS	12	110ALVM	No	16M0018
73		.5	7.50	9	5470	4396	890	277	15.5	USGS			No	00M0026
74	.05		7.40	17	1100	712	230	118	4.0	WQB			Yes	76W2216
75		.5	7.30	8	2010	1580	804	285	3.0	USGS			No	00M0027
76	.068		9.00		2074	1539	801	567	3.5	M8MG			No	74M0121
77	2.485	1.3	7.87	10.5	1450	1104	738	182	1.0	M8MG			No	72M0394
78	6.777	.3	8.70	2.3	4950	4333	2320	1520	5.8	M8MG			No	73M0591
79	.587	.4	8.23	12	810	490	436	364	.5	M8MG			No	72M0396
80		.2	8.12		3425	2831	1420	475	4.6	M8MG			No	74M0118
81		.3	7.94	6	1960	1432	643	360	4.0	M8MG			No	72M0423
82	.678	.2	8.07	13.5	816	503	435	353	.5	M8MG			No	72M0424
83	4.857	.1	8.06	10	925	570	493	324	.5	M8MG			No	72M0425
84	.565	.3	7.95	8	1520	1110	809	398	1.2	M8MG			No	72M0421
85	.633	.2	8.21	20.5	1340	908	763	548	.8	M8MG			No	72M0618
86	.813	.1	8.54		742	467	365	397	1.1	M8MG			No	72M0401
87	49.700		8.21	7.4	1360	775	680	223	.9	M8MG			No	72M0399
88	1.107	.1	8.21	9.2	657	396	349	293	.5	M8MG			No	72M0398
89	.045	.5	8.18	12	3140	2326	84	211	35.4	M8MG		125TGRV	No	73M647
90	.067	.4	8.05		2160	1735	1340	592	.9	USGS		125TGRV	No	73M660
91	.135	.3	7.47	17	2930	2784	2060	289	.6	USGS		125TGRV	No	73M658
92	3.479	.1	7.87	9	483	282	257	192	.1	USGS		125TGRV	No	73M657
93	.158	.2	8.09	11	1258	923	720	309	.6	M8MG	100	125TGRV	No	74M0225
94	3.61	.2	7.82	10.5	1660	1296	930	367	1.1	USGS		125TGRV	No	73M11
95	.23		7.87	13.5	2943	2520	1810	552	1.4	M8MG	195	125FRUN	No	75M0314
96	.29	.1	7.17	13	2326	1883	1440	493	.9	M8MG	149	125FRUN	No	75M0417

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
97	01N	40E	14	BBBB	10	03	73	Well	33	136	79.3	7.6			13.5	354		8.9	499
98	01N	40E	14	BBBB	10	03	73	Well	57	145	93.8	8			12.7	420			585
99	01N	40E	15	BACB	07	25	73	Creek	40	403	230	19.5	.23	2.53	14.1	584		12.0	1722
100	01N	40E	15	BBDA	05	16	75	Well	243	265	192.5	11	.05	.37		707		25	1423
101	01N	40E	15	BDBB	05	16	75	Well	137	182	134.5	11.2	.07	.21	19.9	645		28	782
102	01N	40E	15	BDBD	05	16	75	Well	60	77	117.5	11.5	2.30	.06	36.2	25		17.5	664
103	01N	41E	01	ACAB	09	25	73	Well	73	72	420	10.3			11.1	587		7.9	870
104	01N	41E	01	DDAC	09	25	73	Well	349	246	127	25.1	.08	.08	22.9	154		10.5	2008
105	01N	41E	03	BBBB	07	25	73	Creek	188	270	180	16.5	.29	.78	18.8	586		13	1426
106	01N	41E	03	CDDD	08	20	73	Well	12.8	145	63.4	5	2.7	.22	9.6	256	18	8.6	490
107	01N	41E	04	AABB	05	16	75	Well	217	199	160	7.7	.01	.12	20.6	594		10.9	1139
108	01N	41E	07	DBBA	10	03	73	Well	118	89	27.3	3.9	.08	.06	39.5	283	8	6.1	427
109	01N	41E	10	AACD	05	16	75	Well	141	288	93	6.1	.01	.16	12	923		7.0	919
110	01N	41E	10	AACD	05	28	75	Well	284	193	220	13.1	.01	.17	11.1	815		8.9	1280
111	01N	41E	12	ADDD	09	25	73	Well	109	92	56.8	5.1	.06	.11	14.7	383		6.6	444
112	01N	41E	12	CBDB	08	02	73	Well	62	184	320	7.4	.10	.05	12	303		12.0	1300
113	01N	41E	13	CDCD	07	18	73	Well	154	177	132	8	2.9	.21	13	555		6.0	926
114	01N	41E	16	BAB	05	13	75	Well	73	68	121.5	5.3			14.1	562		4.1	269
115	01N	41E	23	BCDC	08	09	73	Well	108	237	208.3	8.6	.28	.13	15.9	244	5	13.0	1428
116	01N	41E	27	AADB	02	04	74	Well	302	384	209	4.2	.02	.02	16.1	437		13	2320
117	01N	41E	27	AADD	02	04	74	Well	402	924	500	7.8	.07	.03	15.4	334		33	5394
118	01N	41E	27	DAAC	02	04	74	Well	346	426	173	9	.02	.06	13.9	530		23	2456
119	01N	42E	07	CBA	02	04	74	Well	341	486	325	3.5		.02	21.8	377		56	3112
120	01N	42E	10	CCDC	10	18	72	Well	246	325	182	8.2	.14	.01	22	319		16.5	1998
121	01N	42E	17	BDDC	02	04	74	Well	176	232	33.6	5.5		.07	17.2	601		7.4	935
122	01N	42E	18	AAAB	09	25	73	Well	317	269	60.4	8.8	3.0	1.05	17	724		9.2	1440
123	01N	42E	18	AAAB	02	04	74	Well	250	281	57.3	7.8	.04	.03	16.2	630		8.2	1404
124	01N	42E	19	DBBA	08	02	73	Well	45	109	170	5.6	.33	.08	12	369		8.5	568
125	01N	42E	22	CABD	09	06	73	Well	253	380	513.8	11	1.77	.23	10.7	477		16.9	2790
126	01N	42E	25	BCDD	09	06	73	Well	113	102	817.5	12.7	.01		9.7	518	4	16.8	1920
127	01N	42E	28	BDDC	08	09	73	Well	38	145	202	7	.70	.08	11.8	321	15	9.9	834
128	01N	42E	33	ADBC	09	28	72	Well	111	122	620	12	3.08	.14	28	615		15.8	1642
129	01N	42E	34	ACAB	02	01	73	Well	30	9.5	490	5	.02	.03	9	454		10.2	758
130	01N	43E	17	AACA	10	18	72	Well	5.0	2.1	440	1.4	.28	.01	9	480		13.2	565
131	01N	43E	33	BBBB	10	01	73	Well	89	125	73	8		.01	25.2	294		4.6	642
132	01N	44E	04	DABD	06	13	75	Well	29	15.7	1220	5.8	.02	.04	5.9	795		42	1982
133	01N	44E	07	AADA	11	29	72	Well	280	400	470	6.9	.68	.56	11	479		30	2815
134	01N	44E	12	CBCA	09	12	73	Well	2.6	.5	507.5	1.7			10.1	1042	39	83	73
135	01N	44E	14	BBDC	09	25	73	Well	3.1	.5	510	1.6		.01	8.7	981	53	115	66
136	01N	44E	29	ACBD	09	13	73	Well	114	98	210	9.6			11.1	203		10.3	948
137	01N	44E	30	BDCA	09	13	73	Well	224	449	427.5	24		.02	14.7	316	8	26	2992
138	01N	44E	31	AABA	09	13	73	Well	3.2	.6	383.8	1.7			8.9	449	34	13.9	332
139	01N	44E	34	DCCB	09	29	72	Well	110	134	442	13	.27	.12	13	565		9.2	1278
140	01S	31E	14	ABD	09	16	76	Seep	430	10500	25300	210	.46	.98		1566		2530	73000
141	01S	31E	15	DA	09	16	76	Pond	257	366	3890	62	.20	.08		216		1216	6350

Note. All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

of Selected Waters (Con't.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
97	4.18	.2	8.19		1344	956	651	290	1.4	MBMG		125TGRV	No	74M0213
98	2.281	.2	8.04	10	1524	1111	750	344	1.5	MBMG		125TGRV	No	74M212
99	.971	.3	8.27	26	3130	2732	1790	479	2.4	MBMG			Yes	73M589
100	.11	.3	7.44	6	3113	2509	1710	580	2.0	MBMG		125FRUN	No	75M0309
101	.34	.2	7.48	7	2179	1613	1100	529	1.8	MBMG		125FRUN	No	75M0308
102	.56		5.42	9	1305	999	469	21	2.4	MBMG		125FRUN	No	75M0307
103	.271	.2	7.89		2350	1759	483	490	8.3	MBMG			Yes	73M742
104	.158	.2	7.95		3140	2865	1890	126	1.3	MBMG			Yes	73M743
105	.497	.2	8.11	23	2770	2403	1590	481	2.0	MBMG			Yes	73M588
106	.135		8.49	11.5	1240	882	642	271	1.1	USGS		125TGRV	No	73M669
107	.23	.2	7.46	9.5	2537	2047	1370	488	1.9	MBMG		125FRUN	No	75M0306
108	4.518	.2	8.48	11	1160	864	663		.5	MBMG		125TGRV	No	74M215
109	.25		7.55	11	2493	1921	1560	757	1.0	MBMG		125FRUN	No	75M0315
110	.50		7.70	10	2930	2412	1500	868	2.5	MBMG		125FRUN	No	75M0418
111	.135	.3	7.91		1300	920	652	314	1.0	MBMG			No	73M749
112	.564		8.10	15.5	2540	2047	925	249	4.6	USGS		125TGRV	No	73M667
113	.045	.2	7.64	16	2110	1693	1120	456	1.7	USGS		125TGRV	No	73M655
114	.13	.1	7.73	13.5	1234	827	466	453	2.5	MBMG		125FRUN	No	75M0313
115	.542		8.36	19	2544	2143	1260	217	2.5	USGS			No	73M803
116	4.518	.2	7.74		3800	3468	2350	358	1.9	MBMG			No	74M208
117	7.161		8.17		7247	7450	4860	274	3.1	MBMG			No	74M209
118	.294	.2	7.66		3948	3709	2640	435	1.5	MBMG			No	74M207
119	.045		7.72		4980	4531	2880	309	2.6	MBMG			No	74M203
120		.4	7.97	10.5	3160	2955	1970	261	1.8	USGS		125TGRV	No	73M2
121	.271		7.79		2173	1703	1410	493	.4	MBMG			No	74M201
122	.293	.1	7.67		2920	2482	1910	594	.8	MBMG			Yes	73M740
123	113	.1	7.67		2720	2286	1790	435	.8	MBMG			No	74M200
124	.067	.2	8.42	11	1510	1116	567	354	3.1	USGS		125TGRV	No	73M668
125	.203	.2	8.02	11	4696	4213	2220	391	4.8	USGS		125TGRV	No	73M794
126	.045	.6	8.34			3250	703	438	13.4	USGS		125TGRV	No	73M802
127	.112	.2	8.68	10	1906	1422	704	313	3.3	USGS		125TGRV	No	73M801
128	.023	.5	8.16	10	3490	2808	786	422	9.7	USGS		125TGRV	No	72M755
129	.858	.6	7.94		2420	1537	112	372	20.1	USGS		125TGRV	No	73M60
130	.226	2.2	8.05	10.5	2050	1275	21	394	41.6	USGS		125TGRV	No	73M1
131		.1	7.85	10.5	1410	1112	745	241	1.2	USGS	79	110ALVM	No	73M824
132	1.94	.9	7.98	12	5436	3696	138	652	45.2	USGS		125TGRV	No	75M0592
133	1.717	.2	7.73	11	4530	4252	2370	393	4.2	USGS		125TGRV	No	73M15
134	.067	6.0	8.63	16	1998	1237	8	986	76.2	USGS		125TLCK	No	73M808
135	.135	6.0	8.54	14.5	1994	1247	10	982	70.2	USGS		125TLCK	No	73M814
136	1.694	.4	8.28	11	1946	1503	692	167	3.5	USGS		125TGRV	No	73M810
137	.067	.1	8.49	19.5	4400	4319	2430	279	3.8	USGS		110ALVM	No	73M812
138	.497	1.7	8.88	13	1552	481	10	481	49.1	USGS		125TGRV	No	73M811
139	.068	.5	7.90	11.5	2830	2274	831	458	8.7	USGS		125TGRV	No	72M757
140	510		8.20	17	72200	113200	44300	1276	52.3	WQB			Yes	76W2218
141	.30		7.40	23	14740	12250	2150	177	36.5	WQB			Yes	76W2217

Chemical Analyses

Map ref no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
142	01S	32E	23	BD				Well	665	136		24	1.5		18	180		4	1980
143	01S	33E	02	DDB	09	15	76	Ditch	91	150	1015	17				797		73	2300
145	01S	33E	13	DD	11	23	37	Well	650	170	53*					92		10	2200
146	01S	33E	14	AB				Well	470	235	1020	13	.11		26	603		143	3580
147	01S	33E	14	DB				Well	439	198	908	13	.03		27			116	3250
148	01S	33E	15	DD				Well	249	124	410	88	.13		27	290		33	1730
150	01S	33E	18	BDD	09	16	76	Seep	480	17600	49090	255	.57	.33		1307		1650	120000
152	01S	33E	19	DA				Well	138	583	109*				20	316		80	365
153	01S	33E	19	DA				Well	112	28	122*		1.2		37	406		43	249
154	01S	33E	24	BC				Well	315	137	1380	20	.82		28	415		280	3580
155	01S	33E	26	CB				Well	142	50	300	7.8			26	347		30	885
156	01S	33E	27	D	10	20	21	Well	103	39	329*		.12		28	325		43	771
157	01S	33E	30	A	10	10	21	Well	74	35	70*		1.3		30	270		20	202
158	01S	37E	01	BAAC	09	11	73	Well	120	75	378	11.3			8.6	358		8.2	1090
159	01S	37E	01	BAAD	09	11	73	Well	67	61	632.5	6			8.3	337		15.5	1476
160	01S	38E	03	CACC	06	27	73	Well	25	51	21.8	3.2			2	284	1	2.4	84
161	01S	38E	09	ACBB	07	18	72	Well	70	97	45	2.4	2.1	.08	13	510		4.7	238
162	01S	38E	09	BADD	07	18	72	Well	82	96	82	4.3	1.2	.09	15	433		7.6	364
163	01S	38E	09	BDDA	08	01	72	Well	104	140	143	7.4		.01	11	256		8.8	901
164	01S	38E	09	CAAA	08	01	72	Well	90	65	182	4.3		.02	16	517		4.1	441
165	01S	39E	12	DCBA	09	12	73	Spring	83	147	136	5.1	.70	.07	14.1	644		4.8	596
166	01S	40E	06	BBDB	09	12	73	Spring	14.7	132	119	10.8	1.35	.03	19.9	350	30	5.4	495
167	01S	40E	07	DADA	09	12	73	Well	42	122	435	7.6			12.1	235		5.5	1442
168	01S	40E	08	AAAC	09	12	73	Spring	54	215	180	11.9	.33	.03	18.2	372	19	7.6	1048
169	01S	41E	02	AABB	09	07	73	Well	143	195	158.5	10.1		.10	16.8	424		9.9	1112
170	01S	41E	17	DAAA	12	01	72	Well	120	161	295	4.8	.08	.01	19	404		10.0	1214
171	01S	41E	23	BACB	02	27	76	Well	5.8	2.0	410	2.1	<.01	.01	7.1	396		9.0	570.6
172	01S	41E	32	CABA	10	27	72	Well	191	284	290	9.1	1.1	.14	18	329		9.6	1930
173	01S	41E	33	DBCB	10	27	72	Well	6.7	1.7	410	2.1		.02	10	400		8.0	549
174	01S	42E	04	DCAB	08	01	73	Well	87	255	870	20.2	.09	.18	25	557	20	33	2536
175	01S	42E	04	DCA	08	01	73	Well	53	157	745	27	.11	.29	24	438	24	27	1920
176	01S	43E	11	CACB	11	29	72	Well	132	119	140	5	.04	.05	22	470		7.1	706
177	01S	44E	08	DCAD	09	28	72	Well	127	135	200	15	1.15	.13	20	376		8.5	971
178	02S	32E	26	A	10	11	21	Well	91	54	215*		.12		35	285		22	630
179	02S	34E	09	BCC	09	16	76	Pond	210	435	1850	35				379		110	5350
180	02S	41E	02	BABA	09	28	72	Spring	28	19.5	27.4	3	.05		24	183		3.8	51
181	02S	41E	02	DABC	11	30	72	Well	259	313	714	28.6	.04	.28	16	648		20	2840
182	02S	44E	12	BCCA	09	21	72	Spring	45	47	175	8.6			17	603		5.6	265
183	02S	44E	14	CB	09	21	72	Spring	61	73	77.5	6.2		.01	21	512		4.4	188
184	03S	31E	21	AC	12	31	69	Well			570*					1240		80	94
185	03S	31E	34	BC	06	18	55	Well	630	130	39*					305		14	1800
186	03S	32E	27	AAC	09	16	76	Creek	366	191	1570	17				306		180	3900
187	03S	33E	08	BD				Well	428	273	1290	19	.08		28	493		111	4400
188	03S	35E	18	DC				Well	12	9	625*		1.0		11	393	35	32	954
189	03S	35E	18	DCB	06	28	77	Well	4.8	1.3	640	1.6	.09	.01	9.2	436	12	25.9	940

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet (Con't.)

of Selected Waters (Con't.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
142		4.0	7.6		3040		2220	148	1.3	USGS			No	00M0028
143	<.01		7.8	20	4710	4038	845	653	15.2	WQ8			No	76W2223
145							2320	75		M8MG		331MDSN	No	37M0003
146		.3	7.1	8	6590	5784	2140	495	9.6	USGS			No	00M0029
147		.4	7.0	10	5830	4951	1910		9.0	USGS			No	00M0030
148		.4	7.3	7	3380	2804	1130	238	5.3	USGS			No	00M0031
150	186		7.9	29	89970	18990	7370	1070	78.7	WQ8			Yes	76W2219
152					1600		583	259		USGS			No	00M0032
153					1200		395	333		USGS			No	00M0033
154			7.2	11	7010	5946	1350	340	16.3	USGS			No	00M0034
155		.7	7.2	11	2190	1754	562	285	5.5	USGS			No	00M0036
156							417	267		USGS	37	110ALVM	No	21M0104
157							328	221		USGS	18	110TRRC	No	21M0105
158	1.243	.1	7.99	11	2380	1869	611	294	6.7	M8MG		125TGRV	No	74M0037
159	.407	.2	8.20	11		2433	421	276	13.4	M8MG		125TGRV	No	74M0116
160	.926	.2	8.35	12	578	331	274	237	.6	M8MG			No	74M0105
161		.1	8.27	9.2	1060	724	579	418	.8	M8MG			No	72M0420
162			7.86	10	1230	846	604	355	1.1	M8MG			No	72M0419
163	.655	8	8.04	10	1780	1448	843	210	2.2	M8MG			No	72M0403
164	.361	.1	8.12	11	1370	1056	493	424	3.6	M8MG			No	72M0404
165	.135	.2	7.87	13	1834	1304	818	528	2.1	USGS		125TGRV	No	73M799
166		.1	8.76	11	1424	1001	592	389	2.1	USGS		110ALVM	No	73M797
167	.745		8.23	13	2906	2233	735	193	7.0	USGS		125TGRV	No	73M798
168	.564	.1	8.40	12.5	2226	1738	1030	367	2.5	USGS		110ALVM	No	73M796
169	.361	.1	8.01		2348	1854	1170	347	2.0	USGS		125TGRV	No	73M795
170	.836	.1	7.93	10.5	2420	2024	970	331	4.1	USGS		125TGRV	No	73M18
171	.553	.5	8.24	12.5	1820	1203	23	325	37.4	USGS		125TGRV	No	76M0119
172		.2	7.89	12	3220	2895	1660	270	3.1	USGS		125TGRV	No	73M6
173	.181	.9	7.83		1870	1186	24	328	36.6	USGS		125TGRV	No	73M7
174	9.036	.5	8.33	11.5	4820	4129	1290	524	10.6	USGS		125TGRV	No	73M665
175	6.212	.4	8.60	13	3970	3200	791	440	11.6	USGS		125TGRV	No	73M666
176	.633	.2	7.98	9.5	1740	1364	824	386	2.1	USGS		125TGRV	No	73M16
177	.023	.6	7.86	11	2050	1662	876	308	2.9	USGS		125TGRV	No	72M756
178							449	234			21	110TRRC	No	21M0106
179	<.01		8.0	22	8330	8163	2320	311	14.9	WQ8			No	76W2221
180		1.4	7.66	8	377	248	149	150	1.0	USGS		125TGRV	No	72M754
181	.045	.4	7.65	11.5	4800	4511	1950	531	7.1	USGS		125TGRV	No	73M17
182	.713	1.2	8.05	11.5	1190	812	307	412	4.4	USGS		125TGRV	No	72M753
183		1.0	7.99	12	1020	684	453	420	1.6	USGS		125TGRV	No	72M752
184			8.2					1020		M8MG		217LKOT	No	69M0006
185			7.1		3106		2110	250		M8MG		331MDSN	No	55M0005
186	<.01		8.1	22	6454	6561	1700	251	18.6	WQ8			No	76W2222
187		.5	7.1	11	7520	6792	2190	404	12.0	USGS			No	00M0035
188							67	381		USGS			No	00M0037
189	<.023	.2	8.66	10	2667	1849	17	377	66.9	USGS			No	78M0002

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo Day Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
190	03S 35E 18 DCDB	06 28 77	River	54	26	23.8	1.8	.22	.01	5.5	216	3.1	1.7	99
192	03S 44E 11 BCAD	04 29 75	Well	3.6	.3	404	2	.01		7.7	947		80	.3
193	03S 44E 33 BDAA	06 05 75	Well	2.2	.4	327.5	1.7			7.7	842		34	.1
194	03S 45E 32 DDA	02 26 78	Well	.8	1.5	348	1.7	.04	<.01	7.6	834		69.1	.5
195	04S 32E 02 AA		Well	524	2249	1000	10	.09		27	455		155	3930
196	04S 32E 16 DBB	09 16 76	Creek	244	85	79	5.4				139		8.5	960
197	04S 32E 23 DC		Well	419	84	200	6.8	1.3		22	446		24	1360
198	04S 32E 23 DC	10 18 21	Well	286	114	275*		1.8		24	425		22	1380
199	04S 32E 28 BO		Well	213	189	490	9.2	.14		26	471		38	1930
200	04S 32E 38 BD		Well	259	82	168	5.9	.34		20	467		16	938
201	04S 32E 36 BD		Well	377	121	197	6.8	.17		24	516		18	1330
202	04S 45E 04 BDA	10 18 76	Creek	43.7	170	380	20				520		18	1130
203	05S 31E 35 CC		Well	.3	.4	186	.9	.3		10	319		7.9	125
204	05S 31E 36 D8		Well	55	41	148	3.3	.08		25	304		11	366
205	05S 32E 11 8B		Well	458	282	775	14	.16		30	430		65	3450
206	05S 32E 20 BA		Well	168	71	118	4.5	.18		27	458		17	550
207	05S 43E 16 DDCC	05 01 75	Creek	58	62	60	9.1	.01		12.8	367	17	4.5	190
208	06S 32E 27 CD	10 08 67	Well	230	75	5*					190		12	700
209	06S 32E 34 A88	08 07 61	Well	640	70	37*					253		16	1700
210	06S 32E 34 ACC	08 08 81	Well	170	64	11*					190		12	610
211	06S 34E 13	11 18 75	Creek	240	227	553	6.9				544		22.5	2160
213	06S 43E 19 DD	06 01 72	Creek	98	152	405	15	.01	.16	12	624		15	1212
214	06S 43E 26 AADB	05 01 75	Creek	69	50	68.5	7.7	.02	.01	15.9	410		3.7	181
215	08S 46E 11 AA	06 16 84	Well	230	34	110*					232		40	860
216	09S 40E 15 DCB	05 27 72	Ditch	26	29	587	6.8	.26		22.7	1088	6	16.5	569
217	09S 40E 16 A8CA	06 21 72	Well	13.6	5.8	515	8.1	.14	.02	14	1258	70	10.6	21
218	09S 40E 16 A8CA	06 21 72	Well	11.2	3.8	524	5.6	.02	.01	12.8	1412		11.7	19
219	09S 40E 16 A8CA	06 22 72	Well	9.7	3.7	525	5.6	.09	.02	10.7	1241	77	8.2	17.2
220	09S 40E 16 A8CD	06 21 72	Well	7.4	10.9	664	7.2		.01	14	1568	62	13	127
221	09S 40E 18 A8CD	06 21 72	Well	5.5	2.1	450	3.9			8.5	1003	83	5.2	14.6
222	09S 40E 16 ABCD	06 21 72	Well	3.6	1	393	3.7			8.5	987	31	5.5	8.6
223	09S 40E 16 A8CD	06 21 72	Well	4.4	1.9	438	3.8		.01	8.6	1174		6.1	.6
224	09S 40E 16 A8CD	06 21 72	Well	21	8.8	659	6.9	.18	.03	12.8	1560	61	14.2	101
225	09S 40E 16 ABCD	06 22 72	Well	3.4	1.6	434	3.6		.02	8.6	1166		6.3	3.8
226	09S 40E 16 ABCD	06 22 72	Well	18.8	8.3	682	7.1	.04	.02	12.8	1742		16.9	113
227	09S 40E 16 A8CD	06 22 72	Well	3.4	1.5	427	3.6		.01	6.5	1137		5.7	2.2
228	09S 40E 22 DBAD	07 27 72	Drein	47	41	42	3.5			5	173	12	4.5	198
229	08S 40E 29 CCAO	07 27 72	Well	3.2	1.6	455	3.7			8	985	102	14.4	22
230	09S 41E 10 CC	06 10 76	Creek	222	297	730	16	1.1	.16		476		15	2830
231	09S 44E 2	06 01 72	Reservoir	81	83	118	6				200	7	5	607

Note: All chemical date are given in milligrams per liter (mg/l) unless otherwise stated
* Values reported as sodium plus potassium

of Selected Waters (Con't.)

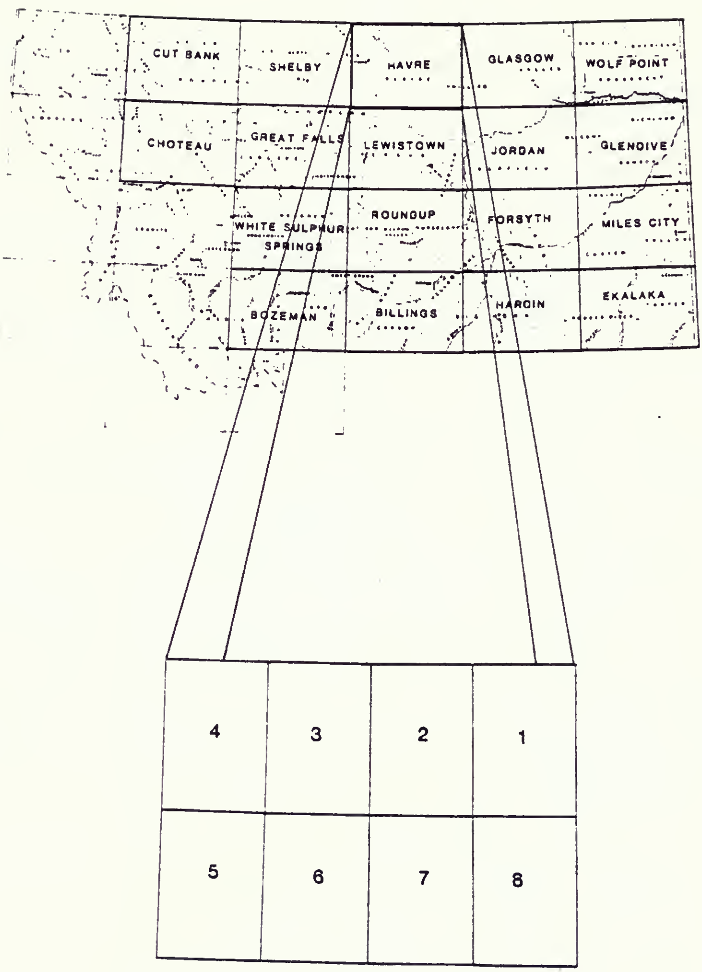
Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
190	<.023	.1	8.41	28	518	322	242	182	.7	USGS			No	78M0003
192	.068	4.7	8.21	11	1810	969	10	777	54.5	USFS			Yes	75M0194
193	.090	1.5	8.19	12.5	1318	790	7	690	53.1	USGS	300		No	75M0603
194	.086	1.3	8.15		1390	842	8	684	52.8	USGS	372	125TGRV	No	76M0114
195		.5	7.0	13	6670	8120	2330	373	4.2	USGS			No	00M0038
196	.10		7.8	23	2535	1451	960	114	1.1	WQB			No	76W2220
197		.6	7.0	12	2720	2337	1390	337[illegible]	2.3	USGS			No	00M0016
198							1180	349		USGS	45	110ALVM	No	21M0107
199		.7	7.3	10	3780	3128	1310	386	5.9	USGS			No	00M0017
200		.5	7.1	10.5	2130	1715	982	375	2.3	USGS			No	00M0018
201		.6	6.9	11.5	2690	2330	1440	423	2.3	USGS			No	00M0019
202			8.5		2689	2033	810	459	5.8	WQB			No	76W2581
203		1.4	8.0	20	825	488	2	262	52.3	USGS			No	00M0020
204		.7	7.5	9	1180	799	304	249	3.7	USGS			No	00M0021
205		.6	7.1	10	6030	5287	2300	353	7.0	USGS			No	00M0022
208		.4	7.2	9	1640	1182	712	378	1.9	USGS			No	00M0023
207	.045	1.4	8.6	13	917	597	405	359	1.3	USFS			Yes	75M0192
208			7.6				883	158		MBMG		331MDSN	No	67M0005
209			7.7				1890	208		MBMG		320AMSD	No	61M0001
210			7.6				668	156		MBMG		331MDSN	No	61M0003
211	.45		8.2		4330	3744	1540	446	6.1	WQB			No	75W2282
213		1.0	8.28	24.5	2845	2218	877	512	6.0	USGS			No	72M239
214	.316	1.1	8.21	5	925	599	378	336	1.5	USFS			Yes	75M0191
215			8.2		1647		714	190		MBMG		337MSNC	No	64M0026
216	.203	1.2	8.52		2670	1790	168	912	18.7	MBMG			No	72M0147
217	3.615	2.0	8.8		2020	1282	58	1260	29.4	MBMG		125FRUN	No	72M0252
218	.068	2.5	8.16		1650	1286	43	1160	34.5	MBMG		125FRUN	No	72M0256
219	4.292	2.5	8.8		1920	1275	39	1280	36.3	MBMG	135	125FRUN	No	72M0262
220	5.422	.9	8.53		2520	1684	64	1490	38.3	MBMG	207	125FRUN	No	72M0252
221		3.5	8.97		1830	1075	22	1100	41.4	MBMG	135	125FRUN	No	72M0254
222	2.937	4.6	8.37	14.3	1480	949	13	912	47.1	MBMG	207	125FRUN	No	72M0225
223	.068	3.6	8.17	12.5	1660	1046	19	963	44.0	MBMG	135	125FRUN	No	72M0257
224	.068	1.4	8.78		2520	1655	89	1480	30.4	MBMG		125FRUN	No	72M0259
225	.045	3.5	8.19	12.5	1620	1039	15	957	48.4	MBMG	135	125FRUN	No	72M0260
226	.068	1.4	8.03		2610	1718	80	1430	33.1	MBMG	136	125FRUN	No	72M0261
227	.587	3.6	8.2		1590	1014	15	933	48.3	MBMG	135	125FRUN	No	72M0264
228	.181	.3	8.8	24	669	439	288	182	1.1	MBMG			No	72M0397
229		2.2	9.5	10.9	1740	1097	14	1150	52.2	MBMG			No	72M0396
230	.04	.3	7.7		5350	4345	1780	389	7.5	WQB			Yes	76W1003
231		.05	8.6	20.5	1380	1006	547	189	2.2	USGS			No	72M0235

HARDIN 1° x 2° Sheet

Trace Elements Analyses Sheet

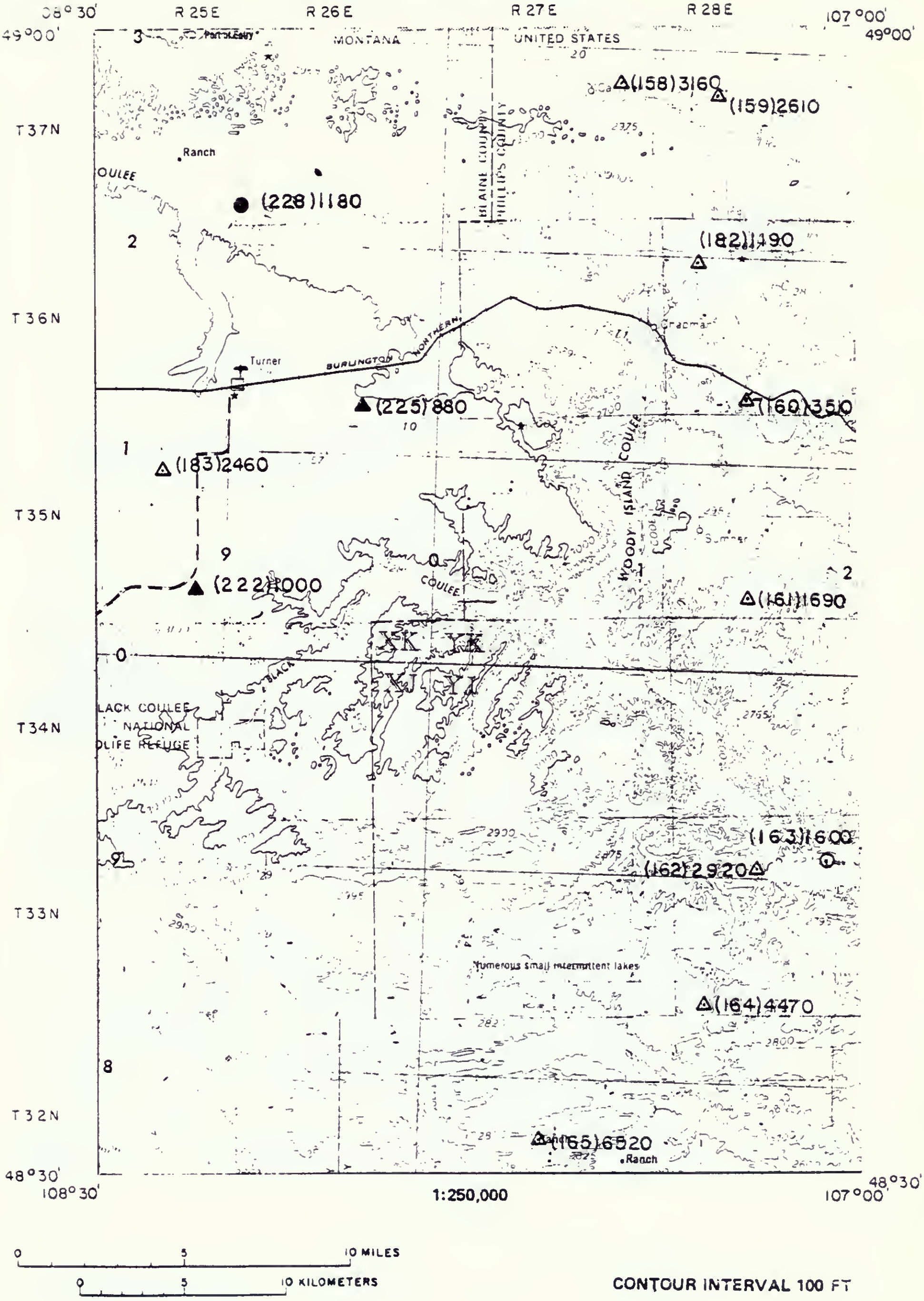
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Beryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
7	03N 41E 28 CCDD					.6	.01	.04	.02	.2		<.2	.05	.10					.02	73M583
44	02N 41E 09 BCBC					1	.01	.02	<.01	.1		<.2	<.05	17					.02	73M582
49	02N 41E 27 BCCC					1.3	.01	.02	<.01	.15		1.2	<.05	.05					.02	73M581
52	02N 41E 34 B					.4	.01	<.02	<.01	.15		.2	<.05	.07					.02	73M580
74	01N 33E 28 DDD			2			<.001		<.01	<.05		<.2	<.05			<.05	.39			76W2216
99	01N 40E 15 BACB						.01	.02	.01	.1		<.2	<.05	.33					.01	73M589
103	01N 41E 01 ACAB					.54	.01	.02	<.02	<.02			<.05	<.05					<.02	73M742
104	01N 41E 01 DDAC					1.17	.01	<.02	<.02	.06			<.05	<.05					<.02	73M743
105	01N 41E 03 BBBB					.2	<.01	.02	.01	.1		<.2	<.05	.07					.01	73M588
122	01N 42E 18 AAAB					1.23	.01	<.02	.02	.06			<.05	<.05					.04	73M740
140	01S 31E 14 ABD			<1.0			<.001		.23	.07		<.2	.12			.44	8.8		.02	76W2218
141	01S 31E 16 DA			33			<.001		.02	<.05		<.2	<.05			.06	4.2		.06	76W2217
150	01S 33E 18 BDD			1			<.001		.24	<.05		<.2	<.05			.48	4.8		.02	76W2219
192	03S 44E 11 BCAD						<.01		<.01	<.05									.05	75M0194
207	05S 43E 16 DDCC			<2.0			<.01		<.01	<.05									.01	75M0192
214	06S 43E 25 AADB			2.6			<.01		<.01	<.05									.01	76M0191
230	09S 41E 10 CC			1	<10	.085	<.001	<.05	<.01	.1		<.2			<1.0		3.4		<.01	76W1003

LOCATION BASE MAP

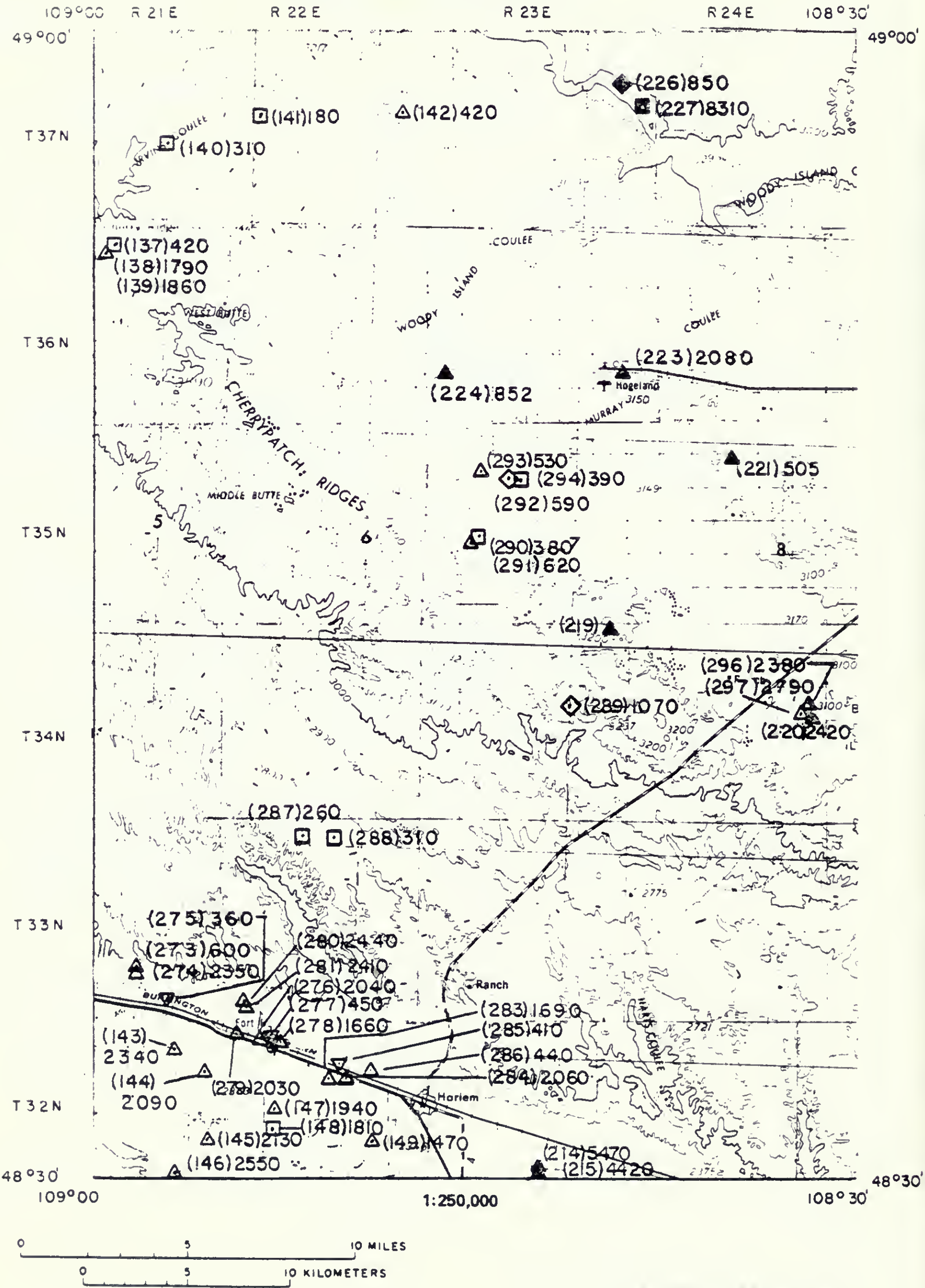


HAVRE 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

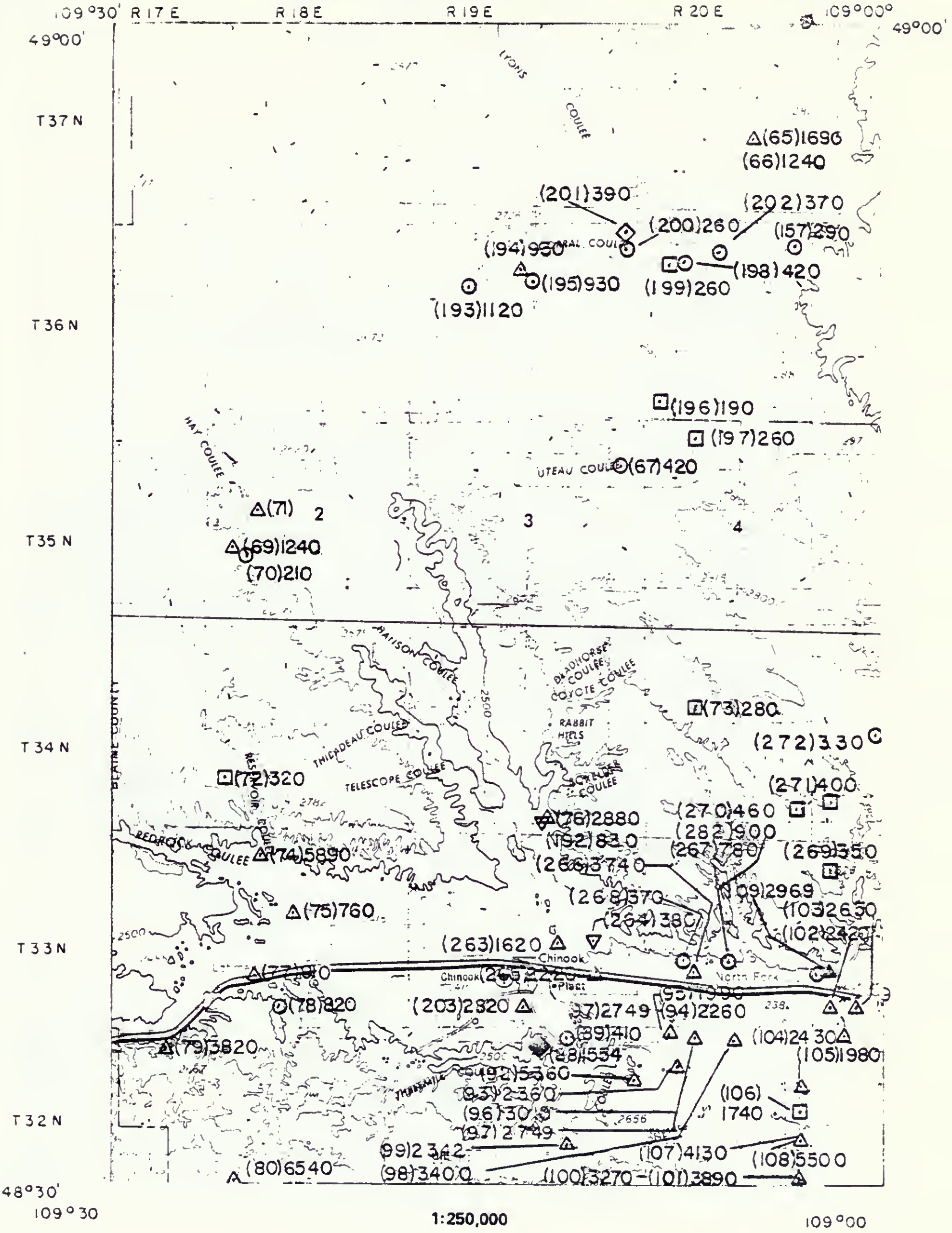


SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CON CTA CE VEY



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0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

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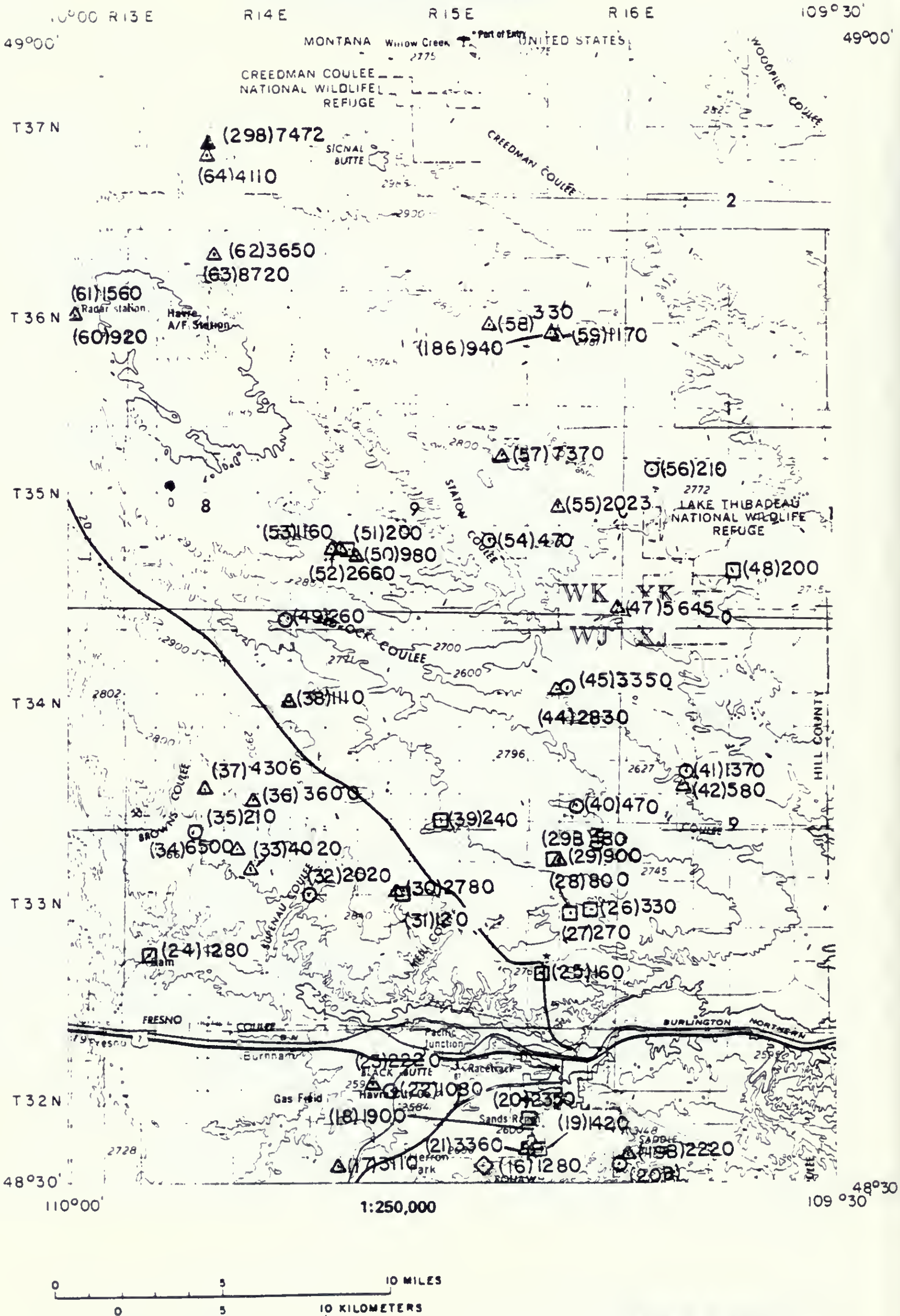

CONTOUR INTERVAL 100 FT

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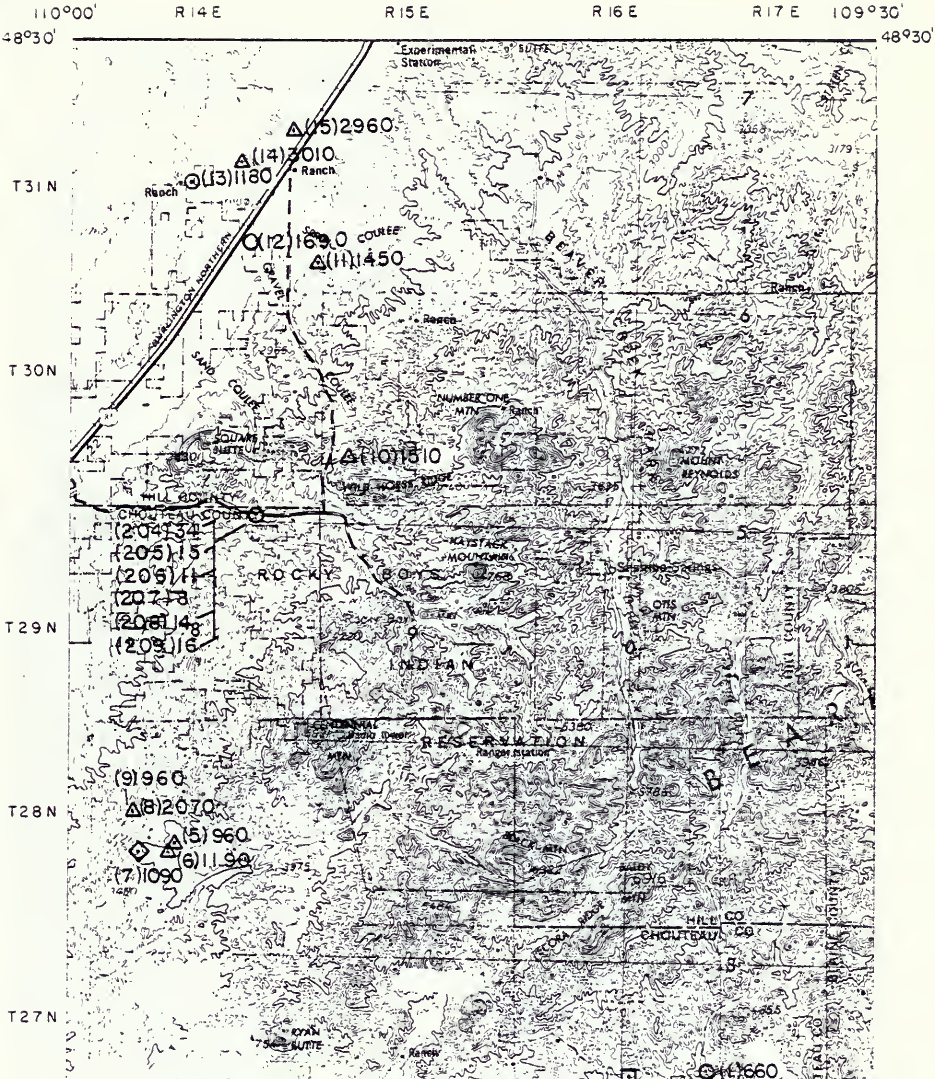

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0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

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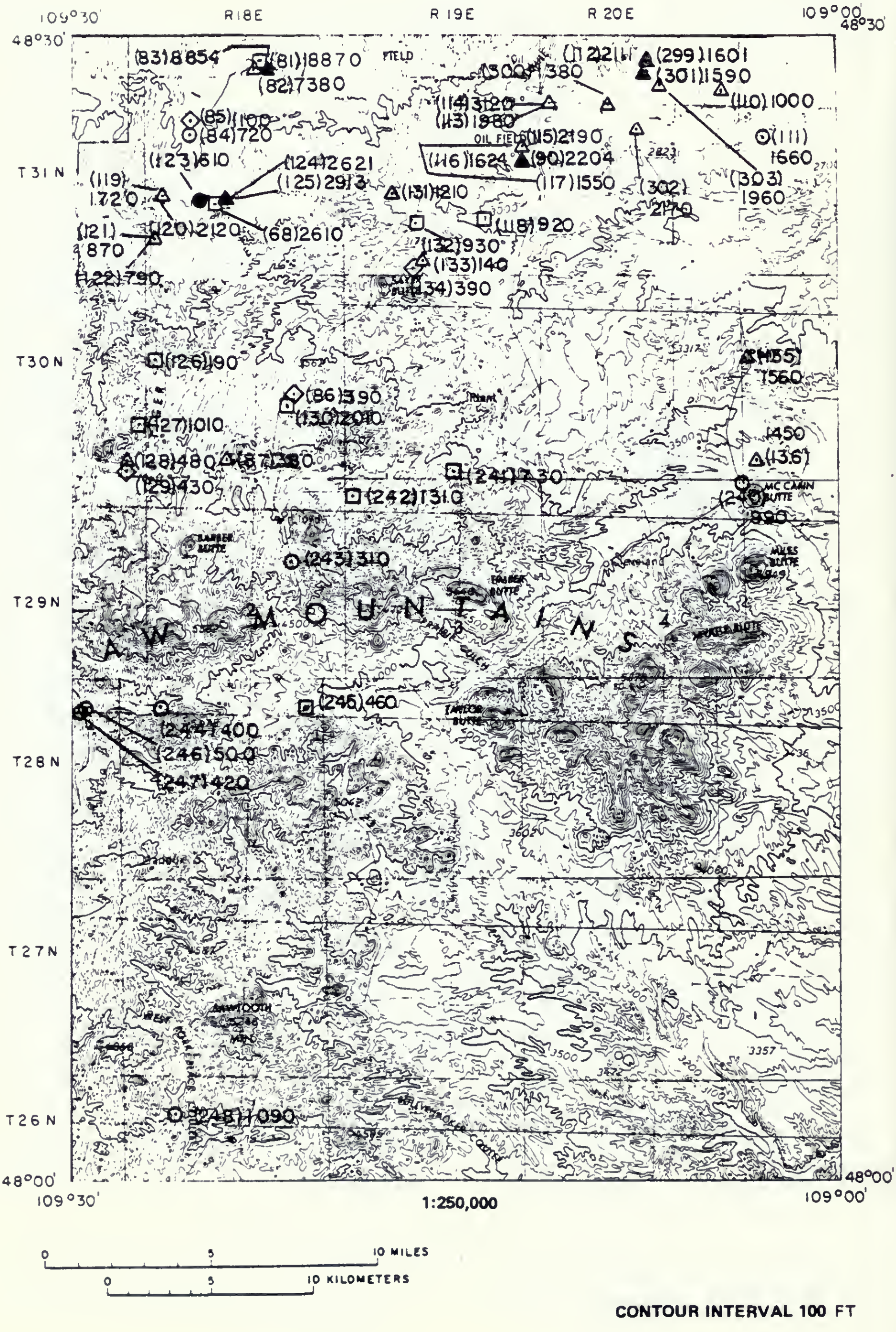
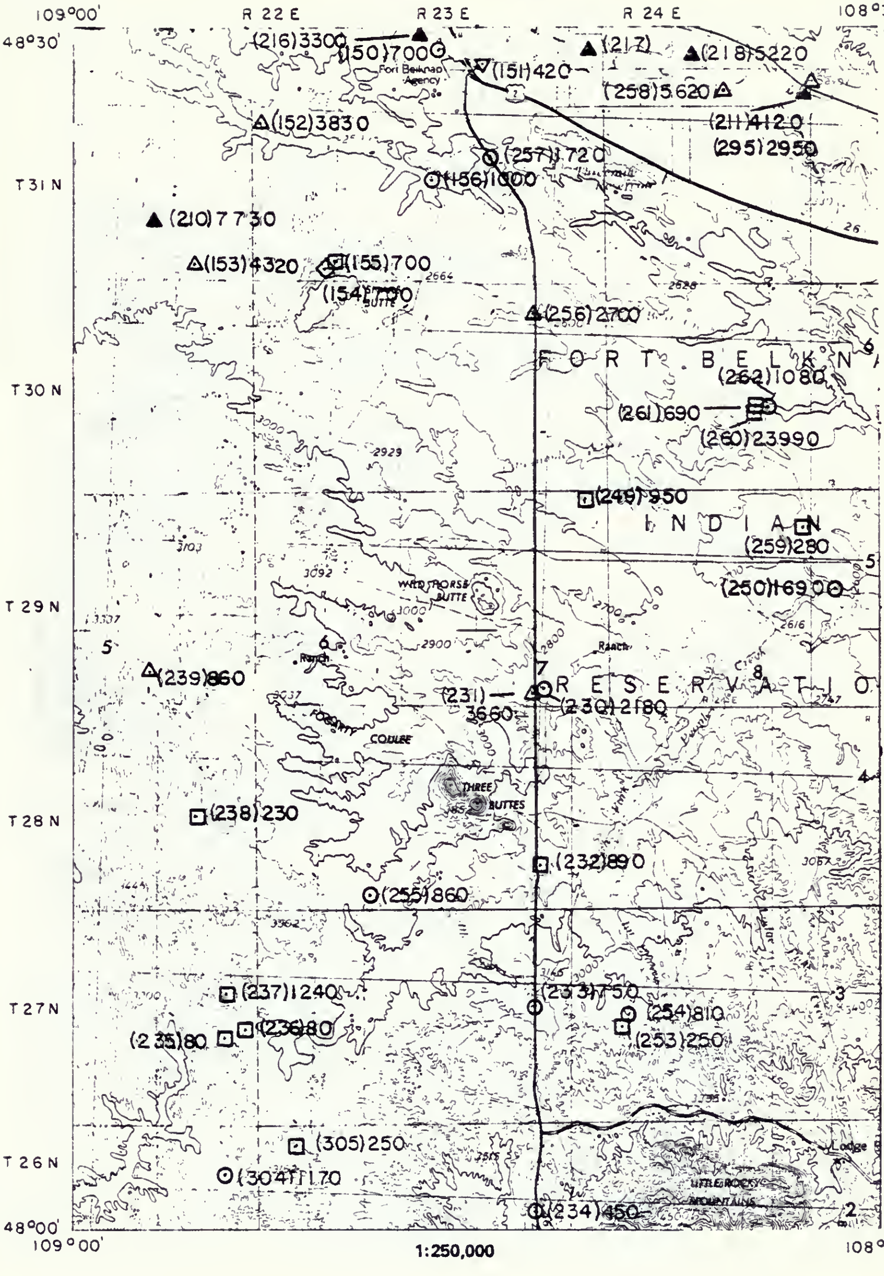


SPECIFIC CONDUCTA E SURVEY

HAVRE-7



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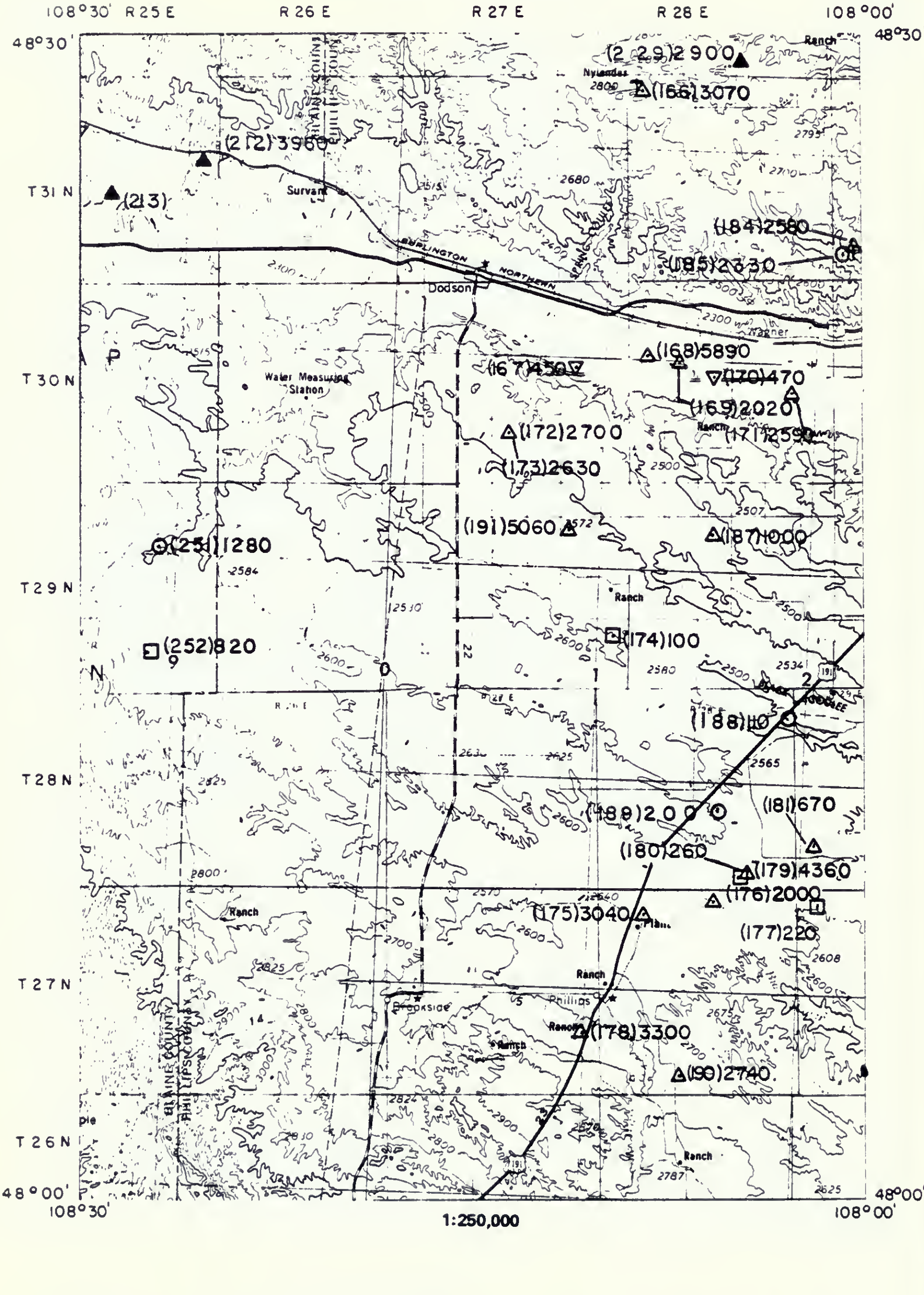
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

HAVRE 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

M Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG71	Chouteau	27N 16E 25 ABCC	08 10 76	Creek	8 cfs	Birch Creek	660	20	no	3920				
2	MBMG70	Chouteau	27N 16E 27 BCCB	08 10 76	Pond	no flow	Recharged by Little Birch Creek	710	21	no	3980				
3	MBMG72	Chouteau	26N 15E 09 DAA	08 10 76	Pond	no flow		490	16	no	3400				
4	MBMG69	Chouteau	27N 15E 33 BACD	08 10 76	Creek	1 cfs (M)	Eagle Creek	410	17	no	3580				
5	MBMG67	Chouteau	28N 14E 21 CBCC	08 10 76	Well	1 gpm	Well is located 100 yards N of house	960	10	no	3500				
6	MBMG68	Chouteau	28N 14E 21 CCB.	08 10 76	Well	1.5 gpm	Stock and domestic use (except for drinking)	1190	9.9	no	3620		100		Welty
7	MBMG66	Chouteau	28N 14E 20 CCBC	08 10 76	Spring	6 gpm	Water is piped 1.1 miles to residence	1090	15.8	no	3480				Welty
8	MBMG64	Chouteau	28N 14E 18 DADC	08 10 76	Well		Well is located 10 feet E of house	2070	19	no	3210		60		Pursley
9	MBMG65	Chouteau	28N 14E 18 DADC	08 10 76	Well		Well is located 50 feet E of house	960	17	no	3210		60		Pursley
10	MBMG174	Hill	30N 15E 30 DBCD	04 12 76	Well		Domestic use except for drinking	1510	19.9	no	3460				Deny, L.
11	MBMG166	Hill	31N 14E 36 AAAC	04 12 76	Well		Stock use	1460	11	no	2760				
12	MBMG165	Hill	31N 14E 27 DAAA	04 12 76	Creek	0.7 cfs	Small creek	1690	10	no	2640				
13	MBMG164	Hill	31N 14E 16 CC	04 12 76	Creek		Big Sandy Creek	1180	17	no	2680				
14	MBMG163	Hill	31N 14E 16 AB	04 12 78	Well		Domestic use	3010	13	no	2600				Khunisis, E
15	MBMG162	Hill	31N 14E 12 BC	04 12 76	Well	4 gpm	Domestic use	2960	13.2	no	2630		260		Lotton
16	MBMG154	Hill	32N 15E 25 BBDD	04 11 76	Spring	5 gpm	Domestic use	1280	16	no	2690				Kuhr
17	MBMG148	Hill	32N 15E 30 AAAC	04 11 76	Well			3110	11.5	no	2600				Kafka
18	MBMG150	Hill	32N 16E 18 DCAC	04 11 76	Seep		Located at the base of a stock dam	1900	20.6	no	2680				Dorcheus
18A	MBMG152	Hill	32N 16E 19 DDBB	04 11 76	Reservoir		Stock reservoir, seeps located downstream	1420	13.5	no	2700				Dorcheus
19B	MBMG155	Hill	32N 16E 22 CDCD	04 11 76	Well	4 gpm	Domestic use	2220	10.2	no	2640	.			Widderkind
20A	MBMG149	Hill	32N 16E 18 DCAA	04 11 76	Reservoir		Stock reservoir	2350		no	2610				
20B	MBMG156	Hill	32N 16E 27 BBAA	04 11 76	Creek	5 cfs				no	2600				
21	MBMG151	Hill	32N 16E 19 DCBD	04 11 76	Well			3360	10.8	no	2870	6	20		Dorcheus
22	MBMG147	Hill	32N 15E 09 CDDB	04 11 76	Creek	40 cfs	Beaver Creek	1080	16	no	2570				
23	MBMG146	Hill	32N 15E 08 DAAA	04 11 76	Well		Domestic use	2220	14.1	no	2680		260		Hansen
24	MBMG134	Hill	33N 14E 18 DDB		Reservoir		Fresno Reservoir	1280	14	no	2610				
25	MBMG153	Hill	33N 16E 30 BDDD	04 11 76	Reservoir		Stock reservoir	160	19	no	2740				
26	MBMG100	Hill	33N 16E 17 DACB	04 11 76	Reservoir		Stock reservoir	330	13.9	no	2720				
27	MBMG98	Hill	23N 16E 17 CBCC	04 11 76	Reservoir		Stock reservoir	270	18.6	no	2770				
28	MBMG99	Hill	33N 16E 17 CCAB	04 11 76	Reservoir		Stock reservoir	800	26.5	no	2770				

HAVRE 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
29A	MBMG97	Hill	33N 16E 06 DDD	04 11 76	Well		Domestic and stock use	900	22	no	2760	8	16		Mork
29B	MBMG105	Hill	33N 16E 06 DDC	04 11 76	Reservoir		Stock reservoir	180	13.5	no	2760				Mork
30	MBMG104	Hill	33N 15E 09 CCCB	04 13 76	Well		Stock use prior to 1975, unused since	2780	6	no	2640		18		Knudson
31	MBMG96	Hill	33N 16E 09 CDCC	04 13 76	Reservoir		Stock reservoir	120	14.9	no	2840				Knudson
32	MBMG95	Hill	33N 14E 12 DCCC	04 13 76	Creek			2020	11.8	no	2660				
33	MBMG94	Hill	33N 14E 10 ABAB	04 13 76	Well		Domestic use except for drinking	4020	15	no	2710		405		Mc Slay
34	MBMG93	Hill	33N 14E 03 CABD	04 13 76	Well		Domestic use except for drinking	6500	14.8	no	2720		166		Morse
35	MBMG92	Hill	33N 14E 04 BBAB	04 13 76	Creek		Kiehns Coulee	210	15.5	no	2700				
36	MBMG84	Hill	34N 14E 34 AABC	04 13 76	Well		Domestic use except for drinking	3600	12.9	no	2850		410		Morse
37	MBMG83	Hill	34N 14E 26 CDDD	01 11 77	Well	10 gpm	Domestic and stock use	4306	10	yes	2720	40	340		Springer
38	MBMG85	Hill	34N 14E 14 AADC	04 12 76	Well		Domestic use	1110	9.6	no	2900	14			Draeger
39	MBMG91	Hill	34N 15E 34 CAD	04 12 76	Reservoir		Stock reservoir	240	16	no	2820				Vereploegen
40	MBMG58	Hill	34N 16E 32 BCB	04 11 76	Creek		Coal Creek	470	14	no	2707				
41	MBMG89	Hill	34N 16E 28 ACC	04 11 76	Creek		Redrock Coulee	1370	16.9	no	2600				
42	MBMG90	Hill	34N 16E 26 DBA	04 11 76	Well		Domestic use	580	13	no	2600		15		Keller
43	not on map														
44	MBMG87	Hill	34N 16E 07 DDB	04 11 76	Well	16 gpm	Stock use	2830	6.8	no	2600		13		Dion, W
45	MBMG86	Hill	34N 16E 08 CBC	04 11 76	Creek		Redrock Coulee	3350	11.4	no	2820				
46	not on map														
47	MBMG67	Hill	35N 16E 33 ADC	01 11 77	Well		Stock and domestic use (except for drinking)	5645	6	yes	2620		75	211JDRV	Romain
48	MBMG88	Hill	35N 17E 30 BCBA	04 11 76	Reservoir		Wildlife reservoir	200	14.6	no	2700				
49	MBMG56	Hill	35N 14E 35 DADD	04 12 76	Creek		Redrock Coulee	260	19	no	2720				
50	MBMG62	Hill	35N 16E 19 DDBA	04 12 76	Well		Domestic use except for drinking	980	14.9	no	2840		15		Whaley
51	MBMG61	Hill	36N 16E 19 DACC	04 12 76	Reservoir			200	15.1	no	2650				Whaley
52	MBMG59	Hill	36N 15E 19 CBAB	04 12 76	Well		Stock use	2660	12.6	no	2850		130		Whaley
53	MBMG60	Hill	36N 15E 19 CACC	04 12 76	Well		Stock use	1160	6.4	no	2640		30		Velk
54	MBMG63	Hill	36N 16E 23 ADD	04 12 76	Creek			470	11.8	no	2710				
55	MBMG64	Hill	35N 16E 16 ADDB	11 11 77	Well		Domestic use	2023	11	yes	2720			112DRFT	Shreuger
56	MBMG65	Hill	35N 16E 10 ABA	04 11 76	Creek		Lohman Coulee	210	17	no	2723				
57	MBMG57	Hill	36N 15E 01 CDC	04 12 76	Well		Stock use	7370	8.2	no	2780				Knudson

HAVRE 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
58	MBMG51	Hill	36N 15E 14 DDDD	04 12 78	Well		Domestic use	330	11.2	no	2780		17		McIntosh
59	MBMG52	Hill	36N 16E 19 AABB	04 11 76	Well		Domestic use	1170	8.6	no	2800		30		Dusek
60	MBMG45	Hill	36N 13E 14 BDBB	04 13 76	Well		Domestic use	920	14.1	no	2880		30		Malsam
61	MBMG46	Hill	36N 13E 14 BCAD	04 13 76	Well		Stock use	1560	13	no	2880		447		Malsam
62	MBMG48	Hill	36N 14E 04 DCDD	04 12 76	Well		Stock use	3650	12	no	2860		60		Cox
63	MBMG49	Hill	36N 14E 04 DCDA	04 12 78	Well		Domestic use except for drinking	8720	12	no	2860		30		Cox
64	MBMG43	Hill	37N 14E 20 DDDD	01 11 77	Well		Domestic use	4110	10	yes	2810		24	112DRFT	Johnson
65	MBMG09	Blaine	37N 20E 22 BB	07 07 78	Well			1690	10	no	2780		10		Schroeder
66	MBMG10	Blaine	37N 20E 22 BA	07 07 76	Well			1240	8	no	2770		8		Schroeder
67	MBMG12	Blaine	35N 20E 07	07 07 76	Creek		Choteau Coulee	420	21.2	no	2700				
68	MBMG40	Blaine	31N 18E 21 CCC	07 08 78	Pond			2610	22	no	3150				
69	MBMG1	Blaine	35N 18E 19 D	07 07 76	Well	0.5 gpm	Domestic use, perhaps contains high nitrates	1240	14.5	no	2610	7	14		Schellin
70	MBMG2	Blaine	35N 18E 20 CC	07 07 76	Creek		Lodge Creek	210	22	no	2600				
71	MBMG3	Blaine	36N 18E 17 BC	07 07 76	Well					no	2560				Gilmore
72	MBMG27	Blaine	34N 18E 30 CDAA	07 07 78	Pond			320	23	no	2600				Lybeck
73	MBMG11	Blaine	34N 20E 18 DDB	07 08 78	Reservoir		Stock use	280	22	no	2700				
74	MBMG28	Blaine	33N 18E 06 DBCD	07 07 76	Well	10 gpm	Not used for drinking	5890	13	no	2600		300		Lybeck
75	MBMG29	Blaine	33N 18E 16 CABC	07 07 76	Well		Domestic use	760	16	no	2440				Pridgeon
76	MBMG04	Blaine	34N 19E 35 CCB	07 07 78	Well	60 gpm	Domestic use	2880	13	no	2440	30	160		Listou
77	MBMG30	Blaine	33N 18E 29 DBBD	07 07 76	Well		Domestic use	810	12	no	2440				Gardipes
78	MBMG32	Blaine	33N 18E 33 CCAA	07 07 78	Creek	20 gpm		820	23.5	no	2490				
79	MBMG31	Blaine	32N 17E 01 BDBD	07 07 76	Well	2 gpm	Domestic use	3820	15	no	2440	8	120		Johnson
80	MBMG33	Blaine	32N 18E 29 BBCB	07 07 76	Well	8 gpm	Stock and domestic use (except for drinking)	6540	13	no	2880	30	168		
81	MBMG35	Blaine	32N 18E 34	07 07 76	Pond			18770	23	no	2880				Finch
82	MBMG34	Blaine	32N 18E 34 A	07 07 76	Well	6 gpm		7380	9	no	2900	8	14		Finch
83	76M1530	Blaine	32N 18E 34 A	12 22 76	Well	8 gpm (E)	Stock use but cattle won't drink it	8854	8	yes	2900	7	14	112DRFT	Finch
84	MBMG37	Blaine	31N 18E 08 CDAB	07 08 78	Creek	0.5 cfs		720	20	no	2960				Olsen, H. W.
85	MBMG36	Blaine	31N 18E 08 CDBB	07 08 78	Spring		Domestic use	1100	20	no	2960				Olsen, H. W.
86	MBMG51	Blaine	30N 18E 23	07 08 78	Spring	20 gpm		390	12	no	3680				
87	MBMG50	Blaine	30N 18E 33 CA	07 08 76	Well		Domestic use	380	10	no	3830				Davis Ranch

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88	76M1525	Blaine	32N 19E 02	12 31 76	Spring		Domestic use	1554	13	yes	2450			211JDRV	Swenson
89	MBMG59	Blaine	32N 19E 01	07 09 76	Creek		Black Coulee	410	31.5	no	2400				
90	76M1526	Blaine	31N 19E 13	12 23 76	Well	4 gpm	Domestic use	2204	12	yes	2980	80	120	211JDRV	Warburton
91	MBMG60	Blaine	32N 19E 24	07 09 76	Well	3 gpm	Domestic use	990	10	no	2750	53	73	211JDRV	Stearns
92	MBMG73	Blaine	32N 20E 08	07 09 76	Well		Domestic use	5360	12	no	2430		125		Hermes
93	MBMG76	Blaine	32N 20E 09	07 09 76	Well		Domestic use	2360	13	no	3410		140		Graber
94	MBMG74	Blaine	32N 30E 04 A	07 09 76	Well		Domestic use	2260	10	no	2380		150		Overcast
95	MBMG75	Blaine	32N 20E 04 A	07 09 76	Well		Domestic use	1990	11	no	2380		53		Overcast
96	MBMG77	Blaine	32N 20E 03 B	07 09 76	Well	15 gpm	Domestic use	3010	13	no	2380		120		Powell
97	76M1524	Blaine	33N 20E 03 B	12 21 76	Well		Domestic use	2749	8	yes	2380		120	211JDRV	Powell
98	MBMG78	Blaine	32N 20E 02	07 09 76	Well		Domestic use	3400	9	no	2380	20	165		McNeill
99	76M1522	Blaine	33N 31E 31	12 31 76	Well		Domestic use	2342	13	yes	2380		150	110ALVM	Benson
100	MBMG95	Blaine	33N 31E 30	07 11 76	Well		Domestic use except for drinking	3270	6	no	2380				Delvin
101	MBMG96	Blaine	33N 31E 30	07 11 76	Well		Domestic use except for cooking and drinking	3890	12	no	2380				Higgins
102	MBMG80	Blaine	33N 31E 31	07 09 76	Well		Domestic use except for cooking and drinking	2420	13	no	2380				Benson
103	MBMG97	Blaine	33N 31E 32	07 11 76	Well		Domestic use	2650	12.6	no	3380	30	156		Burns
104	MBMG79	Blaine	32N 31E 05	07 09 76	Well	4 gpm	Domestic use	2430	14	no	3380	20	60		Warburton
105	MBMG81	Blaine	32N 31E 07	07 10 76	Well			1980	10	no	2380		135		Schnittgen
106	MBMG82	Blaine	32N 21E 18	07 10 76	Reservoir			1740	22.6	no	2400				Schnittgen
107	MBMG83	Blaine	32N 21E 19	07 10 76	Well	3 gpm		4130	9	no	2530	18	38		Hebbleman
108	MBMG84	Blaine	33N 31E 19	07 10 76	Well	10 gpm		5500	8	no	3540		300		Hebbleman
109	76M1523	Blaine	33N 21E 30	12 21 76	Well		Domestic use except for drinking	2969	13	yes	3380			110ALVM	Delvin, T.
110	MBMG86	Blaine	31N 30E 01 DBC	07 10 76	Well			1000	4	no	3720	15	15		Schillene
111	MBMG85	Blaine	31N 21E 07 BBCB	07 10 76	Creek		Snake Creek	1660	15.6	no	2660				
112	MBMG71	Blaine	32N 20E 34 CB	12 31 76	Well	10 gpm	Stock use	3111	9	yes	2850	350	420	211JDRV	Warburton, W.
113	MBMG61	Blaine	31N 20E 06 BCA	07 09 76	Well	8 gpm	Domestic use	1980	10	no	2900	50	160		Dahl
114	MBMG62	Blaine	31N 20E 06 BDC	07 09 76	Well	7 gpm	Stock use	3120	10.5	no	2880	75	160		Dahl
115	MBMG83	Blaine	31N 19E 13 AAAC	07 09 76	Well	4 gpm	Domestic use	2190	10	no	2980	80	100	211JDRV	Warburton
116	76M1527	Blaine	31N 19E 13 AAAC	12 33 76	Well	4 gpm	Domestic use	1624	9	yes	2980	100	150	211JDRV	Warburton, L.
117	MBMG64	Blaine	31N 19E 13 AAAD	07 09 76	Well	4 gpm	Lawn irrigation use	1550	10	no	2980	100	150	211JDRV	Warburton

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118	MBMG65	Blaine	31N 19E 26 BAC	07 09 76	Reservoir			920	24	no	2960				
119	MBMG41	Blaine	31N 18E 19	07 08 76	Well	5 gpm	Domestic use	1720	15	no	3070	8	30		Vercruyssen
120	MBMG42	Blaine	31N 18E 19	07 08 76	Well		Stock use	2120	10	no	3070		12		Vercruyssen
121	MBMG45	Blaine	31N 18E 30	07 08 76	Well	6 gpm		870	15	no	3200		15		Paulsen
122	MBMG44	Blaine	31N 18E 30	07 08 76	Well			790	12	no	3070	7	25		Ramberg
123	MBMG43	Blaine	31N 18E 20 BCC	07 08 78	Creek	1-1.5 cfs	Clear Creek, algal sample taken	610	20	nu	3040				Vercruyssen
124	MBMG39	Blaine	31N 18E 21	12 22 76	Well	10 gpm	Domestic use except for drinking	2621	4	yes	3080			211JDRV	Paulsen, E.
125	MBMG38	Blaine	31N 18E 21	12 22 76	Well		Stock use	2913	8	yes	3080			211JDRV	Paulsen, E.
126	MBMG46	Blaine	30N 18E 18 DB	07 08 76	Pond			190	24	no	3760				
127	MBMG47	Blaine	30N 17E 25 DA	07 08 76	Pond			1010	23.5	no	3780				
128	MBMG49	Blaine	30N 17E 36 AD	07 08 76	Well			480	8.5	no	3730		30		Ross
129	MBMG48	Blaine	30N 17E 36 AD	07 08 76	Spring			430	11	no	3720				Ross
130	MBMG52	Blaine	30N 18E 23	07 08 76	Pond			2010	23	no	3600				
131	MBMG56	Blaine	31N 18E 20 D		Well		Domestic use	1210		no	3030	20	30		Erskine
132	MBMG55	Blaine	31N 19E 28 CBBB		Reservoir		Grasshopper Reservoir	930		no	3070				
133	MBMG54	Blaine	31N 19E 33 BA		Well		Stock use	1400		no	3060		100		S–B Ranch
134	MBMG53	Blaine	31N 19E 33	07 08 76	Spring		Domestic use	390	13	no	3060				S–B Ranch
135	MBMG67	Blaine	30N 21E 18 BCC	07 09 76	Well	3 gpm		1560	11.6	no	2190	4	1000		Gruzzie
136	MBMG66	Blaine	30N 21E 31 CCDD	07 09 76	Well	25 gpm	Domestic use	1450	9	no	3300	10	15		Kuhr Livestock
137	MBMG23	Blaine	36N 21E 04 C	07 08 76	Reservoir			420	22	no	3110				Swank
138	MBMG21	Blaine	36N 21E 04 B	07 08 78	Well		Domestic use except for drinking	1790	14	no	3100		14		Swank
139	MBMG22	Blaine	36N 21E 04 BD	07 08 76	Well		Domestic use except for drinking	1860	8.3	no	3020	40	186		Swank
140	MBMG24	Blaine	37N 21E 22 CC	07 08 76	Reservoir		Water fowl habitat, possible stock use	310	22	no	3020				
141	MBMG26	Blaine	37N 22E 18 AB	07 08 76	Reservoir		Stock reservoir	180	22	no	3180				Gordon Cattle Co
142	MBMG25	Blaine	37N 22E 14	07 08 78	Well		Domestic use	420	12	no	3180	4			Gordon Cattle Co.
143	MBMG94	Blaine	32N 21E 01 CBAD	07 10 76	Well	8 gpm	Domestic use	2340	14.6	no	2370	40	120		Werk, D.
144	MBMG93	Blaine	32N 22E 07 CACC	07 10 76	Well			2090	18	no	2360				Friede
145	MBMG92	Blaine	32N 22E 19 ABBB	07 10 78	Well		Domestic use	2130	11	no	2370		220		Johnson
146	MBMG91	Blaine	32N 21E 25 AAB	07 10 76	Well	15 gpm	Domestic use	2550	14	no	2430	50	300		Northeim
147	MBMG90	Blaine	32N 22E 21 BABA	07 10 76	Well			1840	12	no	2360		230		Parnell

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148	MBMG89	Blaine	32N 22E 21 CC	07 10 76	Pond		Surrounded by salt crust	1810	30	no	2380				
149	MBMG98	Blaine	32N 22E 24 BA	07 11 76	Well		Domestic use	1470	4.5	no	2350		14		Weeres
150	MBMG100	Blaine	32N 23E 32 DAD	07 11 76	River		Fort Belknap supply	700	18	no	2370				Bradley
151	MBMG99	Blaine	32N 23E 33 DBBB		Canal			420	23	no	2340				
162	MBMG87	Blaine	31N 22E 09 BCDC	07 10 78	Well			3830	14	no	2550				Allen
153	MBMG88	Blaine	31N 22E 31 AADA	07 10 76	Well	3.5 gpm	Stock well	4320	10.5	no	2720	99	205		Funk
154	MBMG103	Blaine	31N 22E 35 CBCA	07 11 76	Spring	35 gpm	At Snake Butte campground	700	1	no	2700				
155	MBMG102	Blaine	31N 22E 35 BDDB	07 11 76	Pond			700	25	no	2700				
156	MBMG101	Blaine	31N 23E 20 BBA	07 11 76	Creek		Three Mile Creek	1000	25	no	2450				
157	MBMG20	Blaine	36N 20E 01 CC	07 08 76	Creek		North Fork Corral Coulee	290	22.6	no	2920				
158	MBMG2	Phillips	37N 27E 10 DDCC	07 22 76	Well	20 gpm	Domestic use	3160	8.4	no	2880	86	116		Haugen
159	MBMG3	Phillips	37N 28E 18 AAC	07 22 76	Well	10 gpm	Domestic use	2610	11	no	2980	354	424		Andrews
160	MBMG19	Phillips	36N 26E 33	07 22 76	Well	5 gpm	Domestic use	3510	14.8	no	2980	12	22		Grabolsky
151	MBMG25	Phillips	35N 28E 33	07 22 76	Well	10 gpm	Water contains much iron	1690	10	no	2980	80	180		Grebofsky
152	MBMG27	Phillips	33N 28E 09	07 22 76	Well		Domestic use	2920	14.3	no	2780				Wilson
153	MBMG28	Phillips	33N 26E 11	07 22 76	Creek	2.4 cfs	Cottonwood Creek	1600	22.1	no	2760				
164	MBMG1	Phillips	33N 28E 31 DA	07 21 76	Well	10 gpm	Domestic use	4470	11	no	2810	300	360		Boos
165	MBMG44	Phillips	32N 27E 22 CB	07 21 76	Well	2 gpm		6520	12.5	no	2820	230	260		Kienenberger
166	MBMG48	Phillips	31N 28E 06 BDCB	07 21 76	Well	15 gpm		3070	15.5	no	2820	350	475		Nylander
167	MBMG52	Phillips	30N 27E 14	07 21 76	Canal			450	21	no	2280				
168	MBMG53	Phillips	30N 28E 18	07 21 76	Well	5 gpm	Domestic and stock use	5890	13	no	2260		160		Anderson
169	MBMG54	Phillips	30N 28E 17	07 21 76	Well		Domestic and stock use	2020	17	no	2250	5	100		Clayton
170	MBMG55	Phillips	30N 28E 16	07 21 76	Canal	10 cfs	Irrigation canal	470	19	no	2250				
171	MBMG56	Phillips	30N 28E 23	07 21 76	Well		Domestic use	2580	13.5	no	2250	6	160		Peterson
172	MBMG50	Phillips	30N 27E 28	07 21 76	Well		Stock use	2700	12	no	2450		90		Lundstrom
173	MBMG51	Phillips	30N 27E 26	07 21 76	Well		Domestic use	2630	13	no	2450		90		Lundstrom
174	MBMG67	Phillips	29N 27E 25	07 21 76	Reservoir		Stock reservoir	100	29	no	2600				
175	MBMG111	Phillips	27N 28E 05	07 23 76	Well		Domestic and stock use	3040	16	no	2550		90		Drum
176	MBMG112	Phillips	27N 28E 03 CDC	07 21 76	Well		Domestic and stock use	2000		no	2560		360		Lazy J–5 Cattle Co.
177	MBMG114	Phillips	27N 29E 06	07 21 76	Reservoir		Stock reservoir	220	25	no	2600				

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178	MBMG110	Phillips	27N 27E 25		Well		Domestic use	3300	22	no	2700	5	350		Taylor
179	MBMG107	Phillips	28N 28E 35	07 21 76	Well	13 gpm		4360	16	no	2550				Doll
180	MBMG108	Phillips	28N 28E 35	07 21 76	Reservoir		Irrigation reservoir	260	25	no	2550				
181	MBMG109	Phillips	28N 29E 30	07 21 76	Well	8 gpm	Domestic and stock use	670	12	no	2550				Blatter
182	MBMG5	Phillips	36N 28E 07 ADDA	07 22 76	Well	25 gpm		1190	8.8	no	2850	13	15		Granlund
183	MBMG20	Phillips	35N 25E 09 ADA	07 22 76	Well	10 gpm		2460	18.2	no	3070		300		Grabotsky
184	MBMG48	Phillips	31N 29E 30 CDDD	07 21 76	Well	3.6 gpm	Domestic use	2580	16.8	no	2500	173	186		Tuma
185	MBMG49	Phillips	31N 29E 31 BDBC	07 21 76	Creek	0.75 cfs	Small creek	2330	22.5	no	2440				
186	MBMG53	Hill	36N 16E 19 AABB	04 11 76	Well		Stock use	840	9	no	2800		30		Dusek
187	MBMG68	Phillips	29N 28E 09	07 21 76	Well	4 gpm	Domestic use	1000	15	no	2480	80	130		Hould, D
188	MBMG105	Phillips	28N 28E 01	07 23 76	Creek			110	25	no	2500				
189	MBMG106	Phillips	28N 28E 22	07 23 76	Creek			200	20	no	2600				
190	MBMG113	Phillips	27N 28E 33	07 23 76	Well	6 gpm	Domestic and stock use	2740	15	no	2620	90	450		Taylor, R
191	MBMG66	Phillips	29N 27E 11 CCA	07 21 76	Well	12 gpm	Domestic and stock use	5060	8	no	2550		300		Wilke
192	MBMG5	Blaine	34N 19E 35 CCA	07 07 76	Ditch		Irrigation ditch	830	22	no	2440				
193	MBMG6	Blaine	36N 19E 08	07 07 76	Creek			1120	24	no	2660				
194	MBMG7	Blaine	36N 19E 10	07 07 76	Well		Domestic use	930	11	no	2700		16		Klutzbuecher
195	MBMG8	Blaine	36N 19E 10	07 07 76	Creek			930	18	no	2690				Klutzbuecher
196	MBMG13	Blaine	36N 20E 32	07 08 76	Reservoir		Stock reservoir	190	22.9	no	2760				
197	MBMG14	Blaine	35N 20E 04	07 08 78	Reservoir		Stock reservoir	260	22	no	2750				Stephens, J.
198	MBMG15	Blaine	36N 20E 09	07 08 76	Creek			420	20.1	no	2780				
199	MBMG16	Blaine	36N 20E 08	07 08 76	Reservoir			260	22.1	no	2770				
200	MBMG17	Blaine	36N 20E 06	07 08 78	Creek		Corral Coulee	260	22	no	2730				Stephens, J.
201	MBMG18	Blaine	36N 20E 06	07 08 78	Spring		Tributary to Corral Coulee	390	20	no	2730				Stephens, J
202	MBMG19	Blaine	36N 20E 03	07 08 76	Creek		Tributery to Corral Coulee	370	23	no	2850				
203	MBMG57	Blaine	33N 19E 34	07 08 78	Well		Domestic use	2820	12	no	2430		7100		Swenson, R. E.
204	75M0040	Hill	29N 14E 02 B	01 23 76	Creek		Lookout Creek	34		yes	3240				
205	74M0445	Hill	29N 14E 02 B	05 19 74	Creek		Lookout Creek	15	4.4	yes	3240				
206	74M0562	Hill	29N 14E 02 B	08 11 74	Creek		Lookout Creek	11	6	yes	3240				
207	74M0600	Hill	29N 14E 02 B	06 18 74	Creek		Lookout Creek	8	7.7	yes	3240				

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208	74M0805	Hill	29N 14E 02 B	07 28 74	Creek		Lookout Creek	14	12	yes	3240				
209	74M0811	Hill	29N 14E 02 B	08 16 74	Creek		Lookout Creek	16	10	yes	3240				
210	76M0239	Blaine	31N 21E 25 BDDB	04 11 76	Well		Saline seep test well H-5	7730	14	yes	2730	43	59	211CLGT	Hansen
211	59M0003	Blaine	31N 24E 01 DA	10 58	Well		Located 0.1 mile S of Savoy	4120	8.3	yes	2330		145	110ALVM	
212	59M0004	Blaine	31N 25E 13 ACCC	10 59	Well	10 gpm	Located 1.2 miles SE of Coburg	3960	8.3	yes	2290	110	167	211JDRV	Chamberlain, B
213	47M0025	Blaine	31N 25E 21 AD	02 47	Well		Located 2.7 miles SE of Coburg			yes	2300		100	110ALVM	
214	59M0005	Blaine	32N 23E 26 BC	10 59	Well	8 gpm	Located 3.5 miles E SE of Harlem	5470	8.3	yes	2330	8	70	110ALVM	Pitch, G
215	59M0006	Blaine	32N 23E 26 CC	10 59	Well		Located 3.8 miles E SE of Harlem	4420	10	yes	2340		130	110ALVM	
216	59M0007	Blaine	32N 23E 31 AB	10 58	Well		Located 2.3 miles S of Harlem	3300	10	yes	2340		70	110ALVM	
217	48M0003	Blaine	32N 23E 36 AC	05 48	Well	5 gpm	Located 5.2 miles SE of Harlem			yes	2320		120	110ALVM	Ekegren, R
218	59M0008	Blaine	32N 24E 33 DC	10 59	Well		Located 3.2 miles NW of Savoy	5220	8.3	yes	2320		240	110ALVM	
219	47M0028	Blaine	34N 23E 01 AB	04 47	Well		Located 7.8 miles S of Hogeland			yes	3200		240	211HLCK	
220	59M0009	Blaine	34N 24E 13 CD	10 59	Well	5 gpm	Located 11.8 miles SE of Hogeland	2420	10.5	yes	3160	100	1210	211JDRV	Modic, L
221	59M0010	Blaine	35N 24E 10 BB	10 59	Well		Located 8 miles SE of Hogeland	505	7.7	yes	3080		49	121FLXV	
222	59M0011	Blaine	35N 25E 27 DD	10 59	Well		Located 12 miles SE of Hogeland	1000	8.8	yes	3080		22	121FLXV	
223	59M0012	Blaine	36N 23E 25 AD	10 59	Well	15 gpm	Located 2 miles E of Hogeland	2080	9.4	yes	3140	38	49	121FLXV	Great Northern R R
224	59M0013	Blaine	36N 23E 30 AC	10 59	Well		Located 5.5 miles W of Hogeland	852	7.2	yes	3100		225	211HLCK	
225	59M0014	Blaine	36N 26N 33 DA	10 59	Well		Located 3.5 miles E SE of Turner	880	7.8	yes	3030		39	121FLXV	
226	59M0015	Blaine	37N 23E 12 CB	10 59	Spring		Located 8.5 miles N NW of Hogeland	850	8.3	yes	3000				
227	59M0016	Blaine	37N 23E 13 DB	10 58	Lake		Alkali Lake	8310	8.3	yes	3000				
228	59M0017	Blaine	37N 25E 35 BD	10 58	Creek		Located 5.5 miles N of Turner	1180	4.4	yes	2900				
229	24M0144	Phillips	32N 28E 34 CBD	11 09 73	Well	12 gpm	Stock use	2900	7.7	yes	2700	220			Petrie, B.
230	MBMG230	Blaine	29N 23E 35 CBCC	07 07 78	Creek	2 gpm (E)	Peoples Creek at USGS gaging station	2180	26.5	no	2720				
231	MBMG231	Blaine	29N 23E 34 DADC	07 07 76	Well	> 60 gpm (M)		3660	11.3	no	2740	flowing	90		Bruell, T.
232	MBMG232	Blaine	28N 23E 25 BCCC	07 07 76	Reservoir		Stock reservoir	890	29.9	no	2840				
233	MBMG233	Blaine	27N 23E 13 CCCB	02 07 76	Creek		Little Peoples Creek	250	23.1	no	2980				
234	MBMG234	Blaine	26N 23E 14 DAAD	07 07 78	Creek	20 cfs	Little Peoples Creek	450	23	no	2400				
235	MBMG235	Blaine	27N 22E 20 DDAB	07 02 76	Reservoir			80	17.8	no	3120				
236	MBMG236	Blaine	27N 22E 21	07 07 76	Reservoir		Marshy area near reservoir	80	28.9	no					
237	MBMG237	Blaine	27N 22E 16 BCCB	07 07 78	Reservoir			1240	27	no	3090				

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Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
238	MBMG238	Blaine	28N 22E 20 BDDB	07 07 76	Lake		Putnam Lake	230	24.9	no	3180				
239	MBMG239	Blaine	29N 21E 36 BBDB	07 07 76	Well	10 gpm (M)	Stock use	860	12.5	no	3290				
240	MBMG240	Blaine	29N 20E 01 AAA	07 07 76	Creek	3 cfs	Peoples Creek	990	23	no					
241	MBMG241	Blaine	30N 19E 34 CDB	07 08 76	Reservoir		Stock reservoir	730	22	no					Holelt, P
242	MBMG242	Blaine	29N 19E 06 CAB	07 08 76	Reservoir		Stock reservoir	1310	22	no					
243	MBMG243	Blaine	29N 18E 14 CAA	07 08 76	Creek	1 cfs		310	12.6	no					
244	MBMG244	Blaine	28N 18E 05 CDB	07 08 76	Creek	1 cfs (E)	Battle Creek	400	18.2	no	4400				
245	MBMG245	Blaine	28N 18E 01 CADD	07 08 76	Reservoir		Irrigation use	460	21	no	4220				
246	MBMG246	Blaine	28N 17E 02 DDBA	07 08 76	Creek	1.5 cfs (E)	Battle Creek	600	19	no	4060				
247	MBMG247	Blaine	28N 17E 02 DDBC	07 08 76	Creek	6.6 cfs		420	19.1	no	4060				
248	MBMG248	Blaine	26N 18E 08 B	07 08 76	Creek	30 gpm	Black Coulee	1090	27.6	no	3860				
249	MBMG249	Blaine	29N 23E 01 BACA	07 09 76	Reservoir		Old Woman Reservoir	950	22.9	no	2635				
250	MBMG250	Blaine	29N 25E 18 DBCD	07 09 76	Creek	1.25 cfs	Peoples Creek	1690	25.6	no					
251	MBMG251	Blaine	29N 25E 11 CDBA	07 09 76	Creek	60 cfs	Peoples Creek	1280	25	no					
252	MBMG252	Blaine	29N 25E 26 CCBC	07 09 76	Reservoir		Stock reservoir	820	24	no					
253	MBMG253	Blaine	27N 24E 20 ACCD	07 09 76	Reservoir		Stock reservoir	250	35	no					
254	MBMG254	Blaine	27N 24E 17 DDCD	07 09 76	Creek	0.14 cfs		810	24	no					
255	MBMG255	Blaine	28N 23E 31	07 09 78	Creek			860	25.1	no					
256	MBMG256	Blaine	30N 23E 03 DDB	07 10 78	Well		Domestic use	2700	17.8	no	2630		180		Gibbs
257	MBMG257	Blaine	31N 23E 16	07 10 76	Creek		Three Mile Creek	1720	17.9	no	2410				
258	MBMG258	Blaine	31N 24E 03	07 10 76	Well		Domestic use	6620	14.9	no	2320		110		Horn
259	MBMG259	Blaine	29N 24E 12 AABB	07 10 76	Reservoir		Stock reservoir	280	26.8	no	2600				
260	MBMG260	Blaine	30N 24E 23 CAC	07 10 76	Pond			23990	31.5	no	2620				
261	MBMG261	Blaine	30N 24E 23 CBAD	07 10 76	Pond			690	30	no	2620				
262	MBMG262	Blaine	30N 24E 23 DB	07 10 76	Creek			1080	30.5	no	2510				
263	MBMG263	Blaine	33N 19E 23	07 09 76	Well	50 gpm	Domestic use	1620	17.7	no		20	140		Reed
264	MBMG264	Blaine	33N 19E 24	07 09 76	Ditch		Irrigation ditch	380	20.8	no					
265	MBMG265	Blaine	33N 19E 25	07 09 76	Well		Stock and domestic use (except for drinking)	2220	8.8	no					Cross
266	MBMG266	Blaine	33N 20E 28	07 09 76	Well			3740	8.9	no			400		Flynn Bros. Ranch
267	MBMG267	Blaine	33N 20E 28	07 09 78	Creek			780	20	no					Flynn Bros. Ranch

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268	MBMG268	Blaine	33N 21E 30	07 09 76	Creek			370	21	no					
269	MBMG269	Blaine	33N 21E 07	07 09 76	Reservoir		Stock reservoir	350	24.7	no					
270	MBMG270	Blaine	34N 20E 36	07 09 76	Reservoir		Stock reservoir	460	21	no					
271	MBMG271	Blaine	34N 21E 31	07 09 76	Reservoir		Stock reservoir	400	21.6	no					
272	MBMG272	Blaine	34N 21E 20	07 09 76	Creek			330	17.2	no					
273	MBMG273	Blaine	33N 21E 27	07 09 76	Well		Domestic use	600	14.5	no			60		Lenhardt
274	MBMG274	Blaine	33N 21E 27	07 09 76	Well		Water has a sulphur smell	2350	12.8	no			170		Miller
275	MBMG275	Blaine	33N 21E 35	07 09 76	Canal		Irrigation canal	360	21	no					Miller
276	MBMG276	Blaine	32N 22E 04	07 09 76	Well		Domestic use	2040	11.5	no			40		Green
277	MBMG277	Blaine	32N 22E 04	07 09 76	Canal		Irrigation canal	450	19.8	no					Green
278	MBMG278	Blaine	32N 22E 04	07 09 76	Well		Domestic and stock use	1660	9	no			350		Benbo
279	MBMG279	Blaine	32N 22E 05	07 09 76	Well		Domestic use	2030	12.2	no			168		Perkins
280	MBMG280	Blaine	33N 22E 31	07 09 76	Well	40 gpm	Domestic use except for drinking	2440	9.4	no			80		Miller
281	MBMG281	Blaine	33N 22E 31	07 09 76	Well	40 gpm		2410	6.8	no	flowing	7	120		Miller
282	MBMG282	Blaine	33N 20E 27	07 09 76	Creek		Battle Creek	900	22.2	no					
283	MBMG283	Blaine	32N 22E 11	07 10 76	Well		Domestic use except for drinking	1690	13.2	no			120		Murphy
284	MBMG284	Blaine	32N 22E 11	07 10 76	Well		Stock use	2060	13	no			120		Murphy
285	MBMG285	Blaine	32N 22E 11	07 10 76	Canal		Irrigation canal	410	20.8	no					
286	MBMG286	Blaine	32N 22E 12	07 10 78	Well			440	13	no					Cowell
287	MBMG287	Blaine	33N 22E 04	07 10 76	Reservoir		Stock reservoir	260	21.8	no					
288	MBMG288	Blaine	33N 22E 03	07 10 76	Reservoir			310	22	no					
289	MBMG289	Blaine	34N 23E 14	07 10 78	Spring		Domestic and stock use	1070	13.2	no					Niederdegger
290	MBMG290	Blaine	36N 23E 20	07 10 78	Reservoir			380	20	no					
291	MBMG291	Blaine	35N 23E 20 CBDD	07 10 76	Well		Domestic use	620	9.6	no			99		Snider
292	MBMG292	Blaine	36N 23E 09	07 10 76	Spring		Domestic use	580	11.5	no					Snider
293	MBMG293	Blaine	35N 23E 08	07 10 78	Well		Domestic use	530	11.8	no			90		Johnson
294	MBMG294	Blaine	35N 23E 09	07 10 76	Reservoir			390	22.2	no					
295	MBMG295	Blaine	31N 24E 01 ADA	07 11 76	Well		Domestic use	2950	16.5	no			33		Baker, D E
296	MBMG296	Blaine	34N 24E 13	07 11 78	Well		Domestic and stock use	2380	13	no			1240	112JDRV	Modic
297	MBMG297	Blaine	34N 24E 13	07 11 78	Well		Stock use	2790	11	no			90		Modic

HAVRE 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
298	MBMG44	Hill	37N 14E 20 DDDA	01 11 77	Well		Stock use	7472	6	yes	2810		24	112DRFT	Johnson
299	76M1520	Blaine	32N 20E 34	12 21 76	Well		Domestic use	1601	10	yes	2840	16	20	211CLGT	Warburton
300	MBMG69	Blaine	31N 20E 05 DDA	07 09 76	Well	10 gpm	Domestic use	1380		no	2840				Nelson
301	MBMG70	Blaine	32N 20E 34 CC	07 09 76	Well	15 gpm	Domestic use	1690	12.5	no	2840	16	20	112TILL	Warburton
302	MBMG68	Blaine	31N 20E 09 DAD	07 09 76	Well	3.5 gpm		2170		no	2760	flowing	135	211JDRV	Tilleman
303	MBMG72	Blaine	31N 20E 03 AB	07 09 76	Well		Domestic use	1960	13	no	2800	10	25		Willman
304	MBMG11	Blaine	26N 22E 08 ADD	07 07 76	Creek		Pool in creek bed	1170	30.2	no	3010				
305	MBMG10	Blaine	26N 22E 03 DADB	07 07 76	Reservoir		Small reservoir	260	24 6	no	3120				

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
37	34N 14E 28 CDDD	01	11	77	Well	31	16.2	1000	3.7	.24	.03	9.4	986		221	1198
47	35N 16E 33 ADC	01	11	77	Well	15.1	3.1	1215	3.6	.03	.02	72	428		1725	1.9
55	35N 16E 18 ADDB	11	11	77	Well	251	56	143	6.3	.09	.42	19.6	454		155	527
64	37N 14E 20 DDDD	01	11	77	Well	421	158	438	6.4	.19	.78	35.7	159		124	2232
83	32N 18E 34 A	12	22	76	Well	514	364	1570	7.4	.07	.01	15	325		147	5203
88	32N 19E 02	12	21	76		180	60	87.5	5	.01	.2	16.5	319		46	541
90	31N 19E 13	12	22	76	Well	130	128	200	5.3	<.01	.01	12.2	587		110	515
97	32N 20E 03 8	12	21	76	Well	4.1	1.1	705	2	.04	<.01	8.1	950	17.8	121	540
99	33N 21E 31	12	21	76	Well	2.5	.5	552	4	.11	.03	8.6	955	19.7	41	.3
109	33N 21E 30	12	21	76	Well	235	110	362	5.4	.02	.09	17.2	649		70	1120
112	32N 20E 34 C8	12	21	76	Well	6.5	5.8	516	1.7	<.01	<.01	5.8	900	24	295	232
116	31N 19E 13 AAAC	12	22	76	Well	78	81.5	160	2.7	.42	.05	13.1	600		93.5	244
124	31N 18E 21	12	22	76	Well	207	163	214	18.5	6.4	3.94	10.3	531		46	1130
125	31N 18E 21	12	22	76	Well	254	228	203	3.8	.14	.09	17.6	720		33	1299
204	29N 14E 02 8	01	23	75	Creek								34			
205	29N 14E 02 8	05	19	74	Creek								7			
206	29N 14E 02 8	06	11	74	Creek								5			
207	29N 14E 02 8	06	18	74	Creek								5			
208	29N 14E 02 8	07	28	74	Creek								7			
209	29N 14E 02 8	08	16	74	Creek								8			
210	31N 21E 25 BDDB	04	11	76	Well	396	148	1475	18	28	.03	12.7	532		117	3881
211	31N 24E 01 DA	10		58	Well	60	26	898	5.3	5.9		18	1030		287	976
212	31N 25E 13 ACCC	10		59	Well	15	7.4	930	4.5	2.2		10	919		221	1030
213	31N 25E 21 AD	02		47	Well	76	26	1298*		.4		31	732		160	2190
214	32N 23E 26 BC	10		59	Well	185	133	1050	7.5	9.4		20	964		115	2320
215	32N 23E 26 CC	10		59	Well	19	5.5	1070	7.5	3.3		8.4	999		134	1390
216	32N 23E 31 AB	10		59	Well	69	34	685	6.6	6.9		19	710		51	1160
217	32N 23E 36 AC	05		48	Well	68	37	897*		5.0		144	915		88	1314
218	32N 24E 33 DC	10		59	Well	19	6	1250	4.9	1.8		7.5	582		69	2200
219	34N 23E 01 AB	04		47	Well	20	8	325*		.8		15	406		51	318
220	34N 24E 13 CD	10		59	Well	2.4	1.9	609	2.4	.5		10.	953		166	279
221	35N 24E 10 BB	10		59	Well	27	30	37	3.4	.02		17	253		7.4	52
222	35N 25E 27 DD	10		58	Well	87	46	69	5.4	.14		21	318		24	229
223	36N 23E 25 AD	10		59	Well	75	88	266	5.2	.4		16	310		85	737
224	36N 23E 30 AC	10		59	Well	58	48	200	5.7	3.2		12	252		11	210
225	36N 26N 33 DA	10		59	Well	46	39	89	5.2	.12		20	316		31	161
226	37N 23E 12 CB	10		59	Spring	39	30	99	6.2	.08		13	252		16	205
227	37N 23E 13 DB	10		59	Lake	5	38	1650	171	.01		4.2	650		1060	2340
228	37N 25E 35 BD	10		59	Creek	39	40	169	6.4	.02		13	466		20	239
229	32N 28E 34 CBD	11	09	73	Well	20	4.4	695	5.9	.01	.04	8.6	1066		11.5	709
298	37N 14E 20 DDDA	01	11	77	Well	424	164	1345	16	.84	7.7	32.3	4		296	3962
299	32N 20E 34	12	21	76	Well	270	57	22.2	3.8	.01	.03	13.7	352		23	584

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters

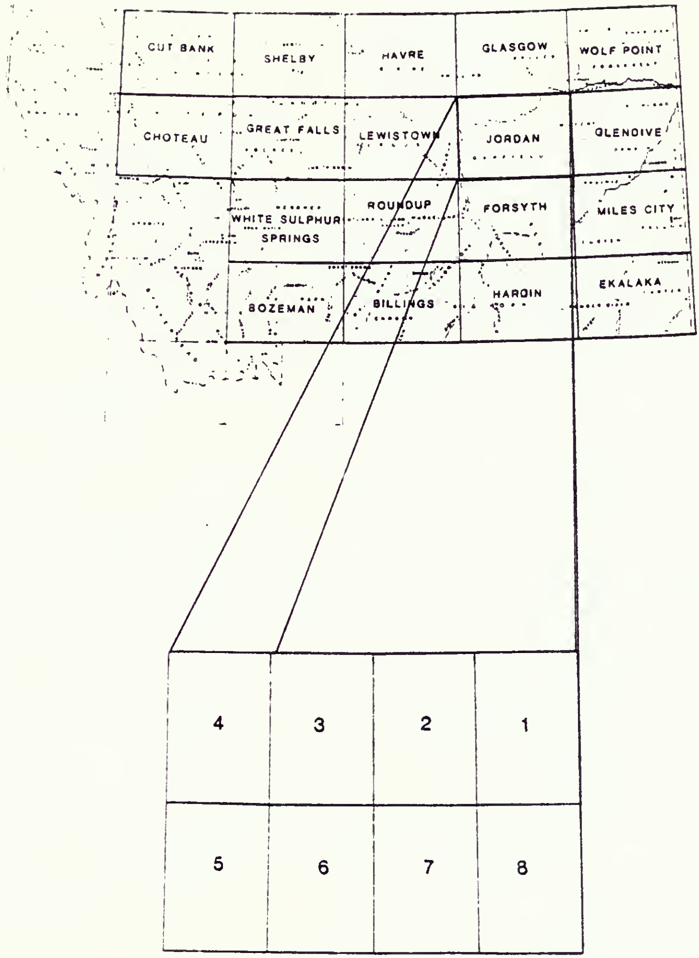
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
37	.38	.3	7.77	10	4306	2966	144	809	36.3	MBMG	340		Yes	76M1577
47	.061	1.7	7.78	6	5645	3248	50	351	74.4	MBMG	75	211JDRV	Yes	76M1581
55	5.422	.2	7.5	11	2023	1388	857	372	2.1	MBMG		112DRFT	Yes	76M1580
64	16.943	.7	6.4	10	4110	3512	1700	130	4.6	MBMG	24	112DRFT	Yes	76M1578
83	83.135	1.1	7.78	8	8854	8065	2780	267	13	MBMG	14	112DRFT	Yes	76M1530
88	2.214	.3	7.45	13	1554	1096	696	262	1.4	MBMG		211JDRV	Yes	76M1525
90	26.544	.2	7.62	12	2204	1416	851	481	3	MBMG	120	211JDRV	Yes	76M1526
97	.949	2.9	8.52	8	2749	1871	15	809	79.8	MBMG	120	211JDRV	Yes	76M1524
99	.316	3.8	8.55	13	2342	1103	8	816	83.4	MBMG	150	110ALVM	Yes	76M1522
109	2.078	.5	7.69	13	2969	2242	1040	532	4.9	MBMG		110ALVM	Yes	76M1523
112	1.039	9	8.63	8	2111	1532	41	778	35.3	MBMG	420	211JDRV	Yes	76M1521
116	2.937	.3	7.38	9	1624	972	530	492	3.0	MBMG	150	211JDRV	Yes	76M1527
124	.059	.3	7.79	4	2621	2059	1190	436	2.7	MBMG		211JDRV	Yes	76M1529
125	1.005	.5	7.74	8	2913	2395	1570	591	2.2	MBMG		211JDRV	Yes	76M1528
204			6.67	30	34			28		Unknown			No	75M0040
205			6.48	4.4	15			6		Unknown			No	74M0445
206			7.25	5	11			4		Unknown			No	74M0567
207			7.11	7.7	8			4		Unknown			No	74M0600
208			7.18	12	14			8		Unknown			No	74M0805
209			7.47	10	18			7		Unknown			No	74M0811
210	45.634	.5	7.96	14	7725	6356	1600	436	16.1	MBMG	59	211CLGT	Yes	76M0239
211		1.0	7.6	8.3	4120	2787	258	845	24	USGS	145	110ALVM	No	59M0003
212		3.2	7.6	8.3	3960	2678	68	754	49	USGS	167	211JDRV	No	59M0004
213							297	600		USGS	100	110ALVM	No	47M0025
214		.7	7.3	8.3	5470	4316	1010	791	14	USGS	70	110ALVM	No	59M0005
215		1	7.8	10	4420	3131	70	819	58	USGS	130	110ALVM	No	59M0006
216		1.6	7.7	10	3300	2383	312	582	17	USGS	70	110ALVM	No	59M0007
217							301	750		USGS	120	110ALVM	No	48M0003
218		.6	7.70	8.3	5220	3846	72	477	64	USGS	240	110ALVM	No	59M0008
219							830	333		USGS	240	211HLCK	No	47M0026
220		4.5	8.00	10.6	2420	1545	14	782	71	USGS	1210	211JDRV	No	59M0009
221		.6	7.6	7.7	505	299	190	208	29	USGS	49	121FLXV	No	59M0010
222		.4	7.3	8.9	1000	639	406	261	1.5	USGS	22	121FLXV	No	59M0011
223		.6	7.5	9.4	2080	1426	549	254	4.9	USGS	49	121FLXV	No	59M0012
224		.3	7.1	7.2	852	672	341	207	4.7	USGS	225	211HLCK	No	59M0013
225		.8	7.5	7.8	883	548	274	259	2.3	USGS	39	121FLXV	No	59M0014
226		.4	7.1	8.3	852	533	221	207	2.9	USGS		110ALVM	No	59M0015
227		.3	8.7	8.3	8310	5789	168	533	61	USGS			No	59M0018
228		.6	8	4.4	1180	756	264	381	4.5	USGS			No	59M0017
229	8.9	.5	8.17	7.7	2900	25	68	874	36.6	Private			No	74M0144
298	40.89	1.8	4.69	8	7472	6292	1730	3	14.1	MBMG	24	112DRFT	Yes	76M1579
299	11.07	.2	7.86	10	1601	1158	909	289	.3	MBMG	20	211CLGT	Yes	76M1520

HAVRE 1° x 2° Sheet

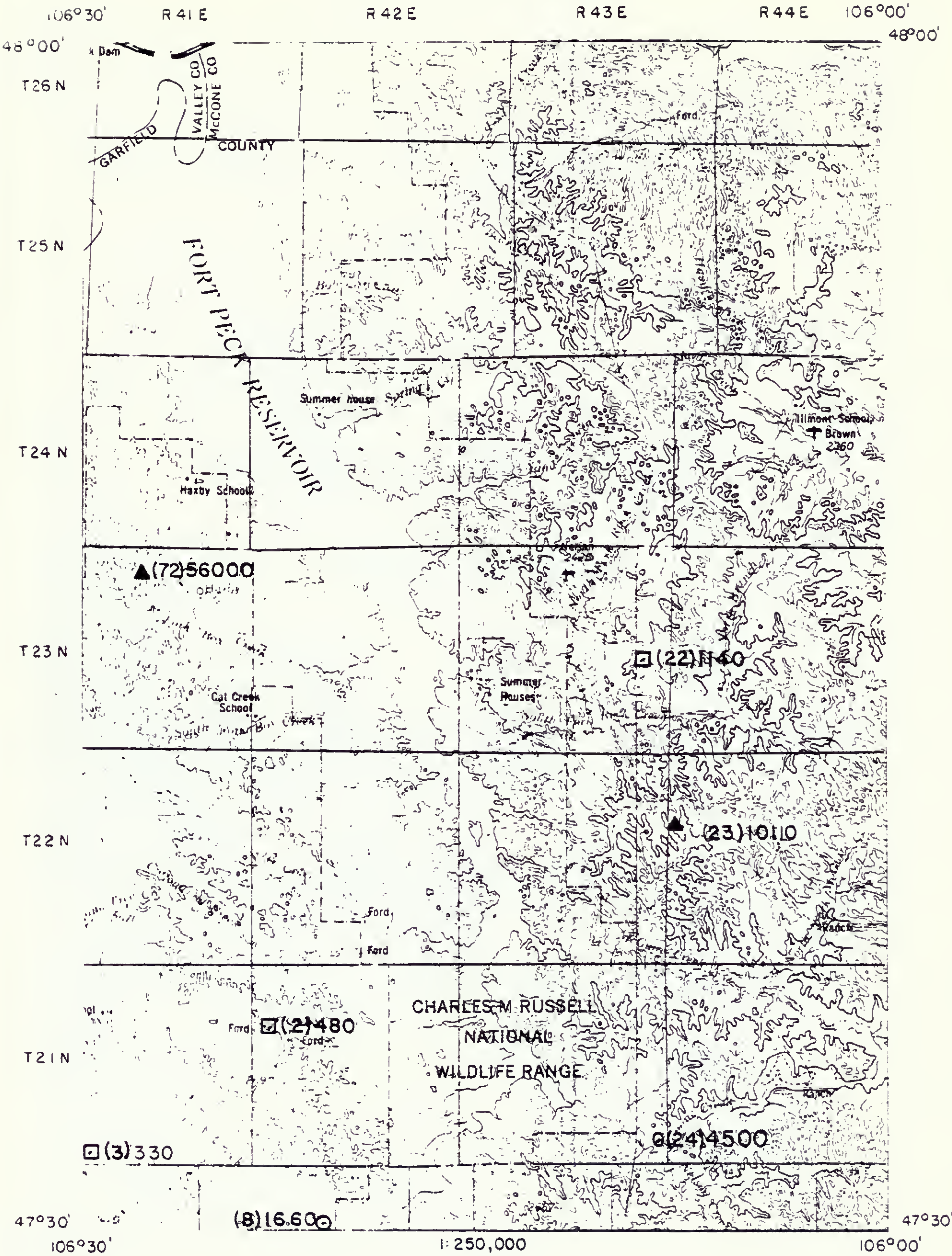
Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Beryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
37	34N 14E 28 CDDD	<.05	<.2	<2.0		.93		<.01	<.01	<.05	.26	<.3	<.01	.016	14.		.91	.17	.29	76M1577
47	35N 16E 33 ADC	<.05	<.2	<2.0		1.4		<.01	.01	<.05	.23	<.3	<.01	.016	<2.0		.58	.12	.07	76M1581
55	35N 16E 18 ADDB	<.05	<.2	<2.0		.15		<.01	.01	<.05	.16	<.3	.02	.023	<2 0		1 47	.25	.20	76M1580
64	37N 14E 20 DDDD	.05	<.2	<2.0	<6.0	.20	<.01	<.01	.02	.020	40	<.3	.15	.014	42.5		1.79	.65	.85	76M1578
83	32N 18E 34 A	.05	.35	<2.0		.82		<.01	.02	.15	1.92	<.3	.07	.036	79		8.20	1.27	.16	76M1530
88	32N 19E 02	<.05	<.2	<2.0		.28		<.01	.03	<.05	.06	<.3	.02	.150	3 1		1.29	.32	5 50	76M1525
90	31N 19E 13	<.05	<.2	<2.0		.32		<.01	.03	<.05	.18	<.3	.01	.033	140		3.35	.62	.11	76M1526
97	32N 20E 03 B	<.05	<.2	<2.0		1.8		<.01	.04	<.05	.15	<.3	.01	.170	<2 0		.23	<.05	.02	76M1524
99	33N 21E 31	.09	<.2	<2.0		1.8		<.01	.01	<.05	.10	<.3	<.01	.176	<2 0		08	.08		76M1522
109	33N 21E 30	<.05	<.2	<2.0		5.1		<.01	.01	.05	.34	<.3	03	.023	<2 0		1.92	.50	.04	76M1523
112	32N 20E 34 CB	.05	<.2	2.1		.90		<.01	<.01	<.05	.13	<.3	<.01	.052	<2.0		.20	.10		76M1521
118	31N 18E 13 AAAC	<.05	<.2	<2.0		.27		<.01	<.01	<.05	.13	<.3	.01	.430	2.8		2.18	.38	.24	76M1527
124	31N 18E 21	<.05	<.2	<2.0		.21		<.01	<.01	.08	.19	<.3	.03	.130	<2.0		1.61	.66	.09	76M1529
125	31N 18E 21	.06	<.2	<2.0		.43		<.01	.01	10	.30	<.3	.03	.026	<2.0		2.55	.76	4.30	76M1528
210	31N 21E 25 BDDB	.13	.2	<2.0	<5	1.3	.01	.02	.02	.08	.97	.41	.09	.033	188		4.69	.30	.06	76M0239
298	37N 14E 20 DDDA	9.35	<.2	<2.0	<5.0	.52	<.01	<.01	.18	<.010	1.01	<.3	.67	.099	112		2.56	.85	.44	76M1579
298	32N 20E 34	.06	.2	<2.0		.06		<.01	.03	<.05	.02	<.3	.03	.140	<2.0		.69	.34	.31	26M1520

LOCATION BASE MAP



JORDAN 1° x 2° SHEET



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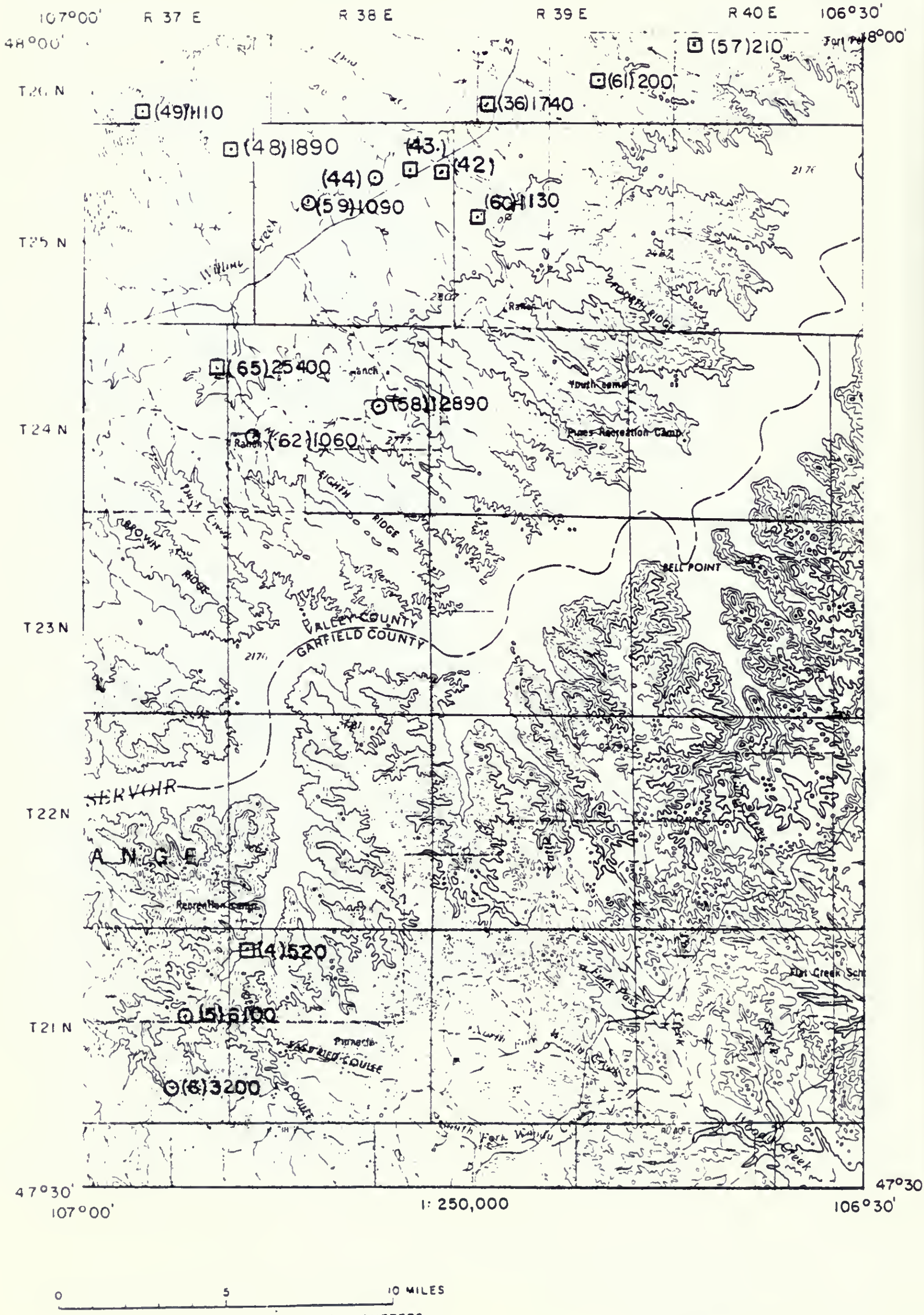
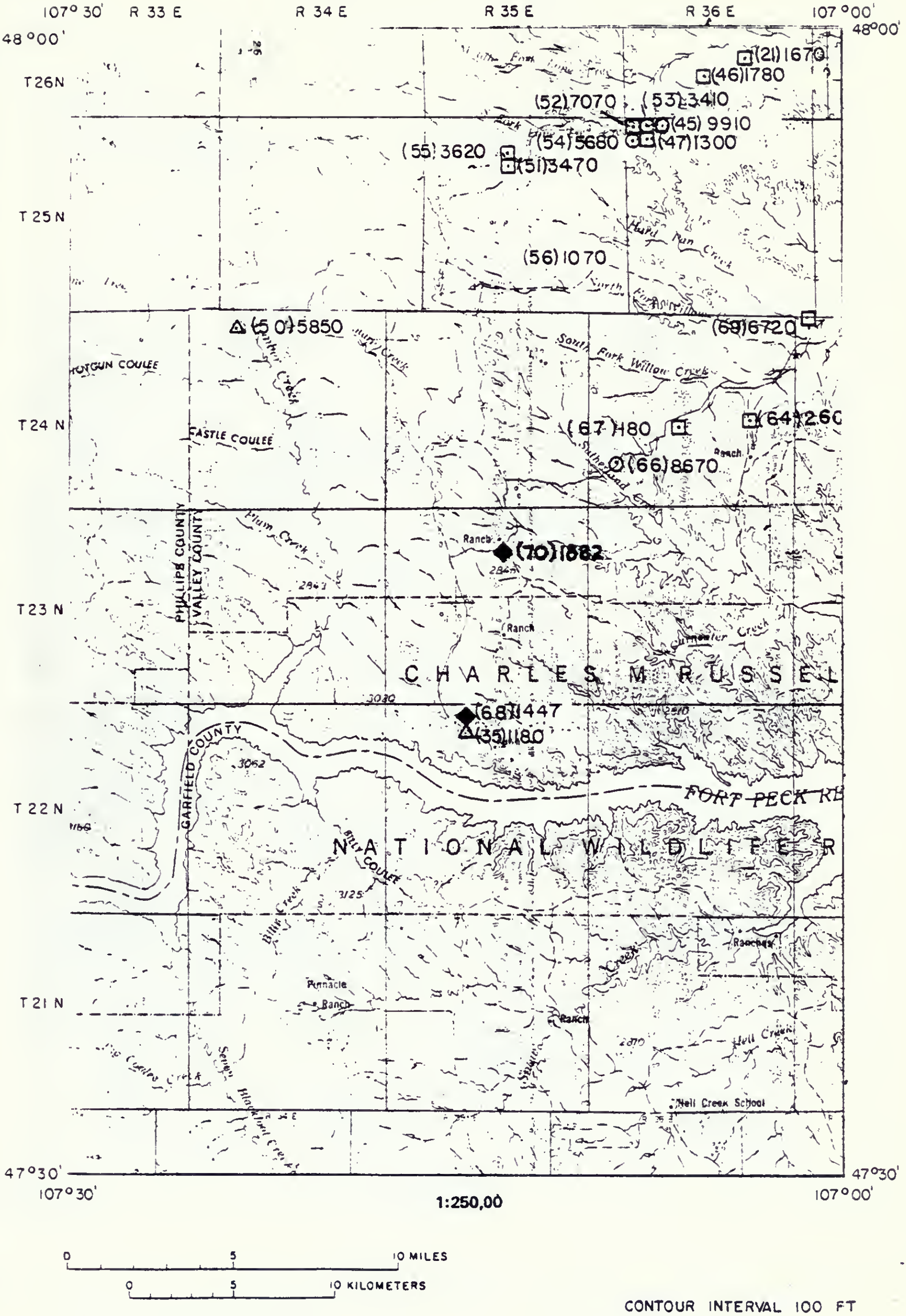
0 5 10 MILES

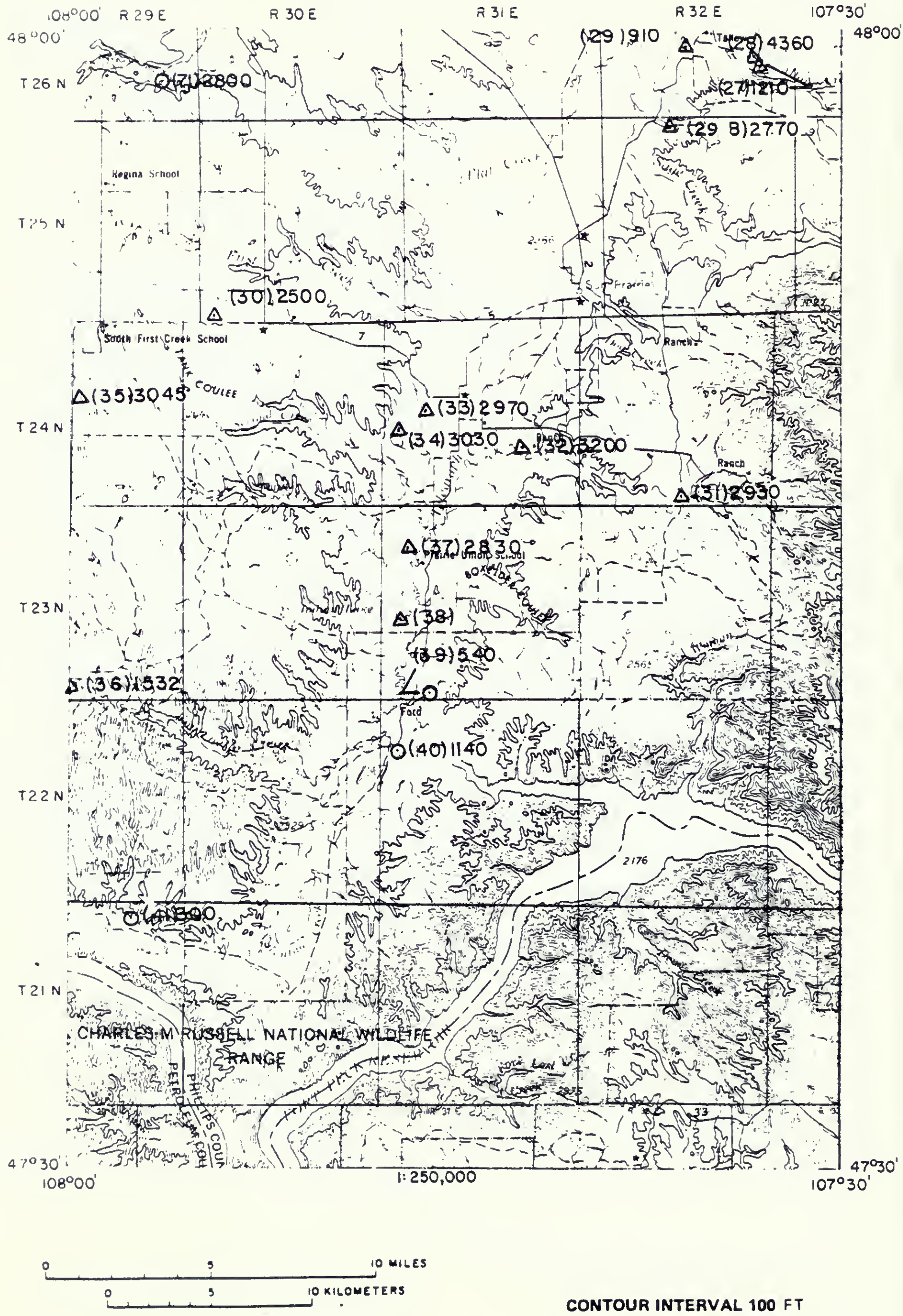
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

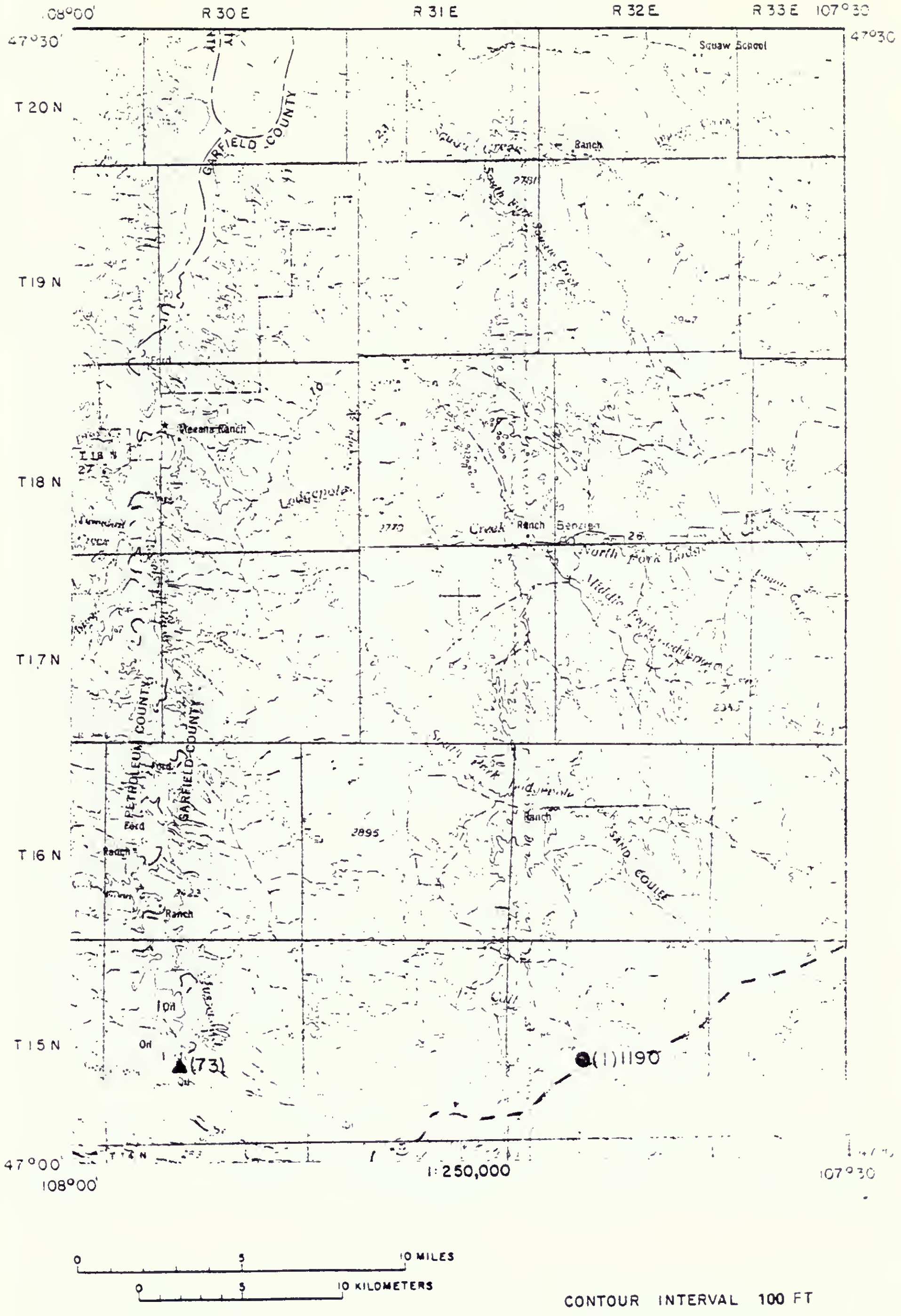


CONTOUR INTERVAL 100 FT

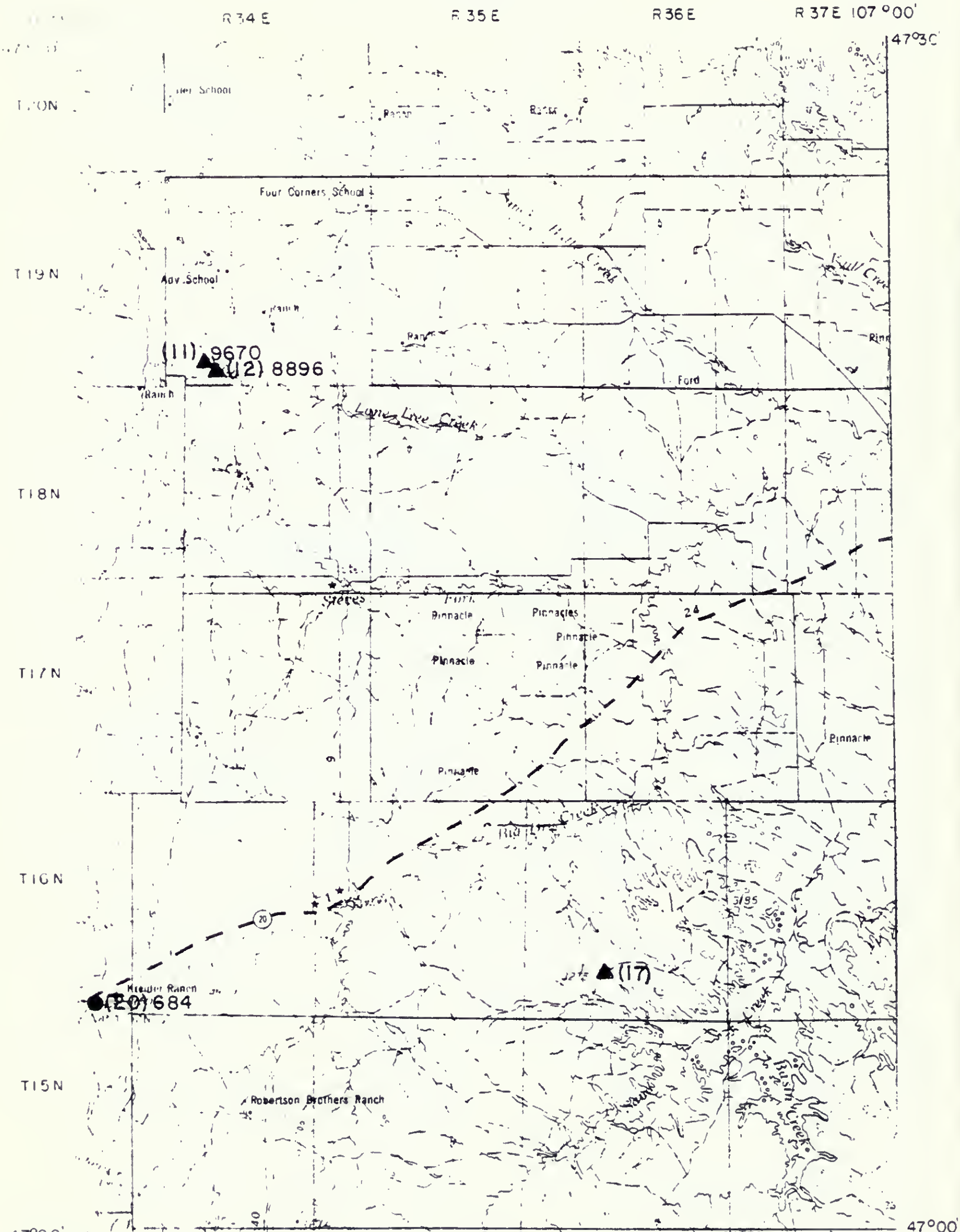

107° 30'
R 33 E
R 34 E
R 35 E
R 36 E
107° 00'
48° 00'
T26N
T 25 N
T24 N
T23 N
T 22 N
T21 N
(21) 1670
(46) 1780
(52) 7070
(53) 3410
(45) 9910
(54) 5680
(47) 1300
(55) 3620
(51) 3470
(56) 1070
(50) 5850
(69) 6720
(67) 1180
(64) 260
(66) 8670
(70) 1882
(68) 1447
(35) 1180
SHOTGUN COULEE
CASTLE COULEE
PHILLIPS COUNTY
VALLEY COUNTY
GARFIELD COUNTY
Plum Creek
South Fork Willow Creek
Ranch
CHARLES M RUSSEL
NATIONAL WILDLIFE R
FORT PECK RE
Billy Coulee
Pinnacle Ranch
Hell Creek
Hell Creek School
47° 30'
107° 30'
107° 00'
1:250,00
0 5 10 MILES
0 5 10 KILOMETERS
CONTOUR INTERVAL 100 FT


108°00' R 29 E R 30 E R 31 E R 32 E 107°30'
48°00'
T 26 N
T 25 N
T 24 N
T 23 N
T 22 N
T 21 N
47°30'
(29) 910
(28) 4360
(27) 1210
(7) 2800
(29 B) 2770
Regina School
(30) 2500
South First Creek School
(35) 3045
(33) 2970
(34) 3030
(32) 3200
(31) 2930
(37) 2830
Prairie Union School
(38)
(39) 540
(36) 1532
Ford
(40) 1140
2176
(41) 1890
CHARLES M RUSSELL NATIONAL WILDLIFE RANGE
PETROLEUM COUNTY
PHILLIPS COUNTY
1:250,000
0 5 10 MILES
0 5 10 KILOMETERS
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY



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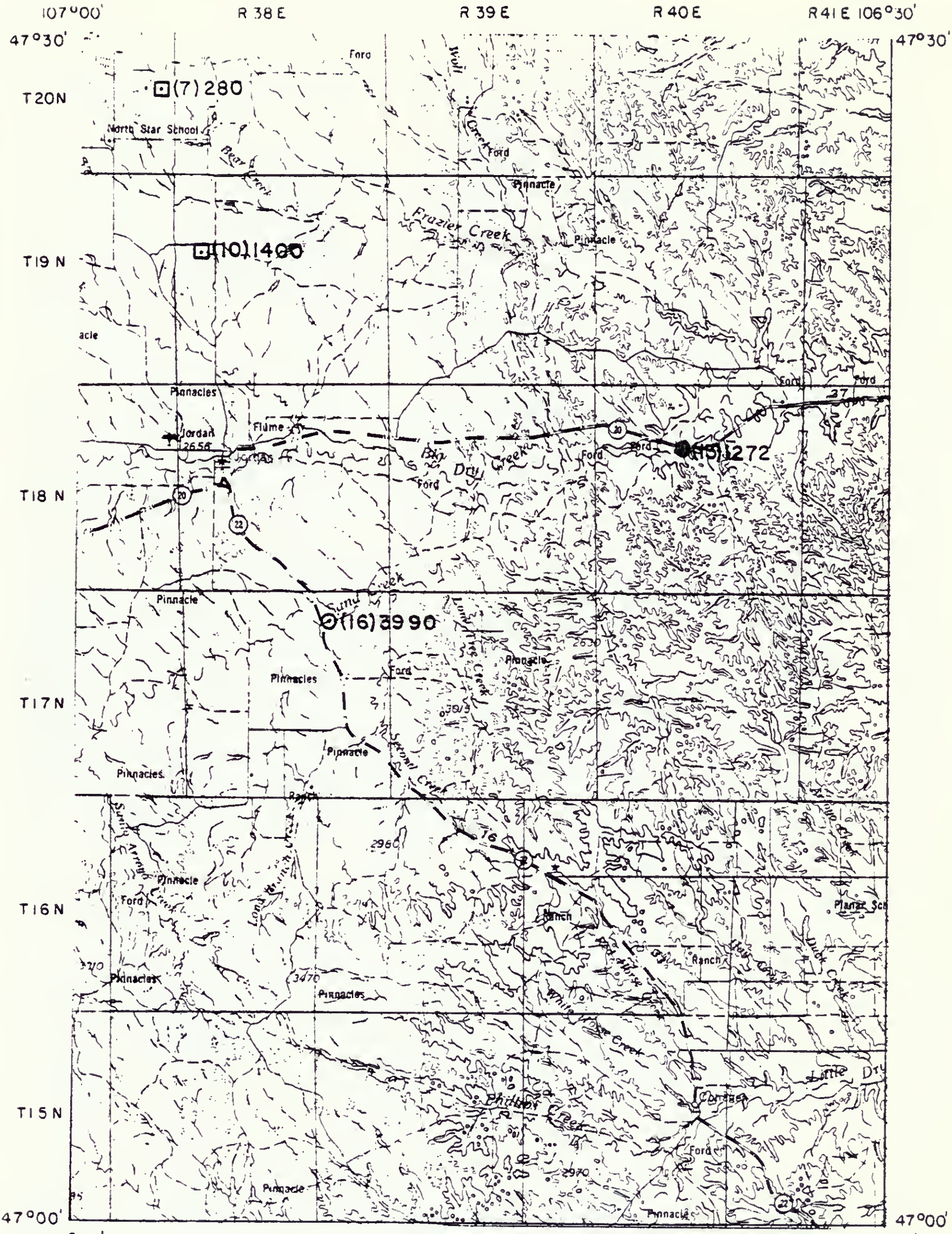
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



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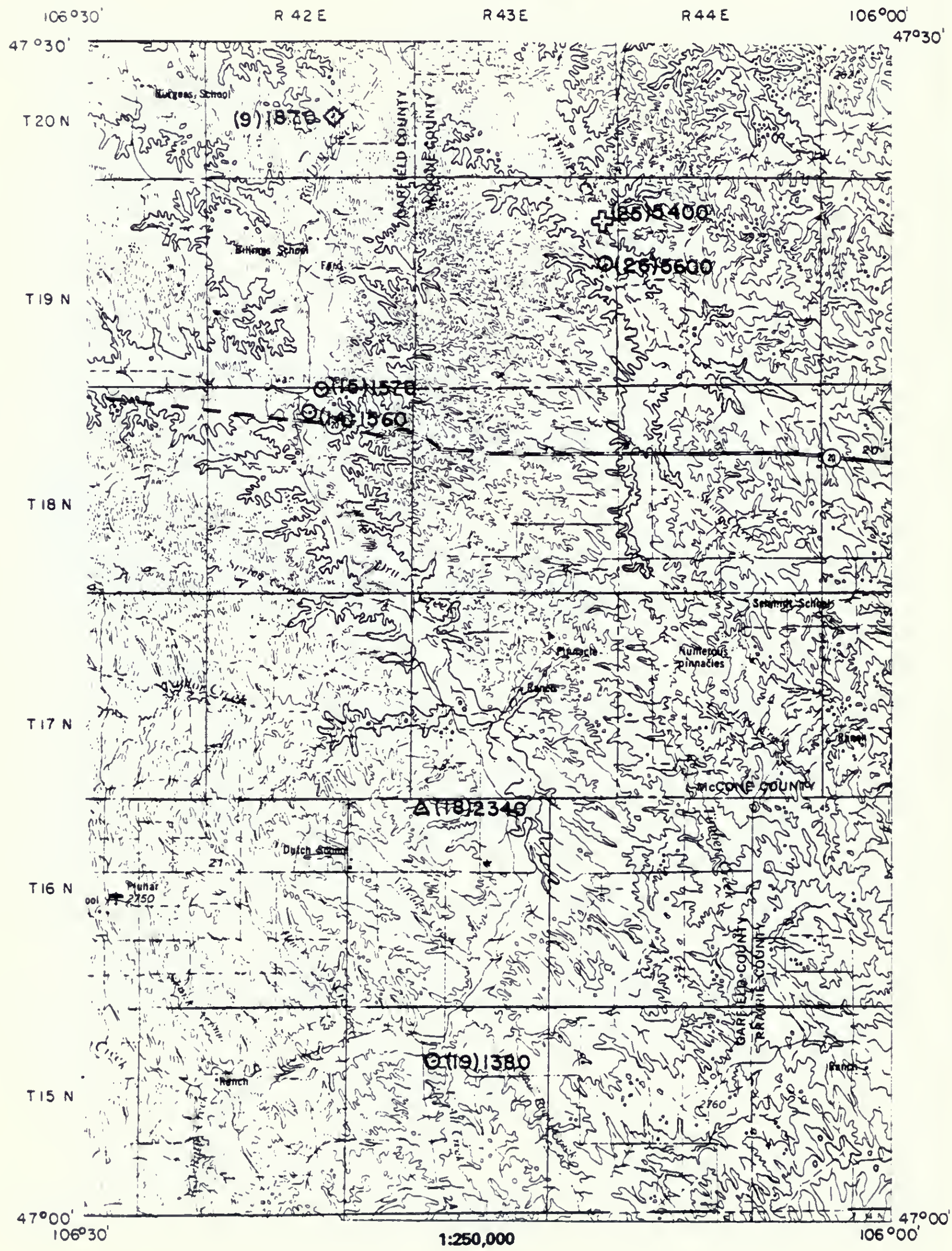
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



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0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

JORDAN 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB17	Garfield	15N 32E 21 CB	03 17 78	Creek	0.8 cfs (M)	Calf Creek near Sand Springs	1190	3.2	yes					
2	WQB5	Garfield	21N 42E 07 CD	09 01 75	Reservoir		Rangeland	480		no					
3	WQB6	Garfield	21N 41E 32 C	09 01 76	Reservoir		Rangeland	330		no					
4	WQB11	Garfield	21N 38E 06	09 01 76	Reservoir		Ft. Peck Reservoir at Hell Creek State Park	520		no					
5	WQB10	Garfield	21N 37E 14 DB	09 01 75	Creek	60 gpm (E)	Hell Creek	5100		no					
6	WQB9	Garfield	21N 37E 26	09 01 76	Coulee		Coulee at the edge of the Missouri breaks	3200		no					
7	WQB8	Garfield	20N 37E 24	09 01 75	Reservoir		Reservoir along Bear Creek, dryland farming area	280		no					
8	WQB4	Garfield	20N 42E 10 D	09 01 76	Creek		Flat Creek	1660		no					
9	WQB3	Garfield	20N 42E 27 A	09 01 76	Spring		Stock tank in river valley, dryland farming area	1870		no					
10	WQB7	Garfield	18N 38E 18	09 01 75	Reservoir		Rangeland, alkali along reservoir and below	1400		no					
11	69M0011	Garfield	19N 34E 32 BDC	04 25 69	Well			9670		yes					
12	69M0010	Garfield	18N 34E 32 BDC	04 29 69	Well			8896		yes					
13	WQB18	Garfield	18N 40E 09 DB	03 17 76	Creek	1.6 cfs (M)	Big Dry Creek at highway near Jordan, Algal sample	1272		yes					
14	WQB1	Garfield	18N 42E 04 DD	09 01 76	Creek	2 cfs (E)	Little Dry Creek	1560		no					
15	WQB2	Garfield	18N 42E 03	09 01 76	Creek	2 cfs (E)	Big Dry Creek	1670		no					
16	WQB19	Garfield	17N 38E 02 CCC	10 07 78	Creek	0.6 cfs (E)	Sand Creek at highway	3980		no					
17	53M0001	Garfield	16N 36E 28 CA	09 14 53	Well					yes	3110			331CRLS	
18	WQB16	Garfield	18N 43E 04 B	09 02 76	Well		In a coulee below dryland farming area	2340		no					
19	WQB14	Garfield	16N 43E 09	09 02 76	Creek		U All Creek	1380		no					
20	WQB21	Garfield	16N 33E 02 AA	03 17 76	Creek	0.3 cfs (E)	South Fork Lodge Creek at Sand Springs	684		yes					
21	MBMG74	Valley	26N 36E 27	07 24 76	Pond		In back of levee below Three Forks Detention Reservoir	1870	20	no	2400				
22	WQB37	McCone	23N 43E 24 BC	09 01 76	Reservoir		About 3 acres in size	1140		no					
23	66M0027	McCone	22N 44E 18 BB	01 11 66	Well		65 miles NE of Jordan	10110		yes	2540			331CRLS	
24	WQB38	McCone	21N 43E 36	09 01 76	Creek	25 gpm (E)	Nelson Creek, rangeland	4500		no					
25	WQB39	McCone	19N 43E 12 BA	09 01 75	Seep	no flow	Coulee, rangeland	5400		no					
26	WQB40	McCone	18N 43E 13	09 01 76	Creek	50 gpm (E)	Timber Creek, rangeland	5600		no					
27	MBMG148	Phillips	26N 32E 26 AC	07 23 78	Well	1 gpm (E)	Domestic use, hard water, 1000 feet SW of house	1210	13.1	no	2440	35	40		Orahood
28	MBMG147	Phillips	26N 32E 26 AC	07 23 76	Well	10 gpm	Stock use, high in sodium	4360	11.8	no	2420	106	590		Orahood
29A	MBMG146	Phillips	26N 32E 21 DD	07 23 78	Well	6 gpm (E)	Stock use, well located 200 feet NW of section corner	810	14	no	2350	16	20		Orahood
29B	MBMG149	Phillips	25N 32E 04 BBB	07 23 78	Well	10 gpm	Stock use, well located NE of house	2770	14.8	no	2380	37	671		Orahood

JORDAN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or Yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
30	MBMG150	Phillips	25N 30E 31 CD	07 23 76	Well	20 gpm	Domestic and stock use	2500	17	no	2600	110	630	211JDRV	Blunt, Alfred
31	MBMG183	Phillips	24N 32E 34 CBC	07 24 76	Well	10 gpm	Water is soft, bad for drinking	2830	17.3	no	2550	260	1100	211JDRV	Barnhard
32	MBMG182	Phillips	24N 31E 26 BDD	07 24 76	Well	10 gpm	Hard water, residents do not use a filter	3200	17.3	no	2390	6	10		Koss
33	MBMG180	Phillips	24N 31E 17 CDBB	07 24 76	Well	7 gpm	Domestic use, located 100 feet SW of house	2970	14	no	2350	flowing	660	211JDRV	Koss
34	MBMG181	Phillips	24N 31E 19	07 24 76	Well	2 gpm	Stock use, located 2.5 miles SW of house	3030	13.2	no	2450	flowing	820	211JDRV	Koss
35	MBMG93	Valley	22N 35E 04	07 24 76	Well		Irrigation and stock use	1180	13	no	2900	80	300		
36	MBMG99	Valley	26N 39E 31	07 24 76	Reservoir		Salts nearby	1740	21	no	2200				
37	MBMG184	Phillips	23N 31E 07 AD	07 24 76	Well	10 gpm	Domestic and stock use, high in sodium and fluorine	2830	18	no	2320	flowing	820	211JDRV	Weidrick
38	MBMG185	Phillips	23N 31E 19	07 24 76	Well	8 gpm	Domestic use, high in sodium content			no		flowing	800	211JDRV	Weidrick
39	MBMG186	Phillips	23N 31E 32	07 24 75	Creek		At entrance to U. L. Bend Wildlife Refuge	540	22	no					
40	MBMG187	Phillips	22N 31E 07	07 24 76	Creek		At bridge	1140	26.2	no					
41	MBMG179	Phillips	21N 29E 02	07 24 75	Creek		Small creek in prairie dog town	300	27.5	no					
42	MBMG101	Valley	25N 38E 12	07 26 76	Reservoir		Reservoir is nearly dry, much alkali on its banks			no	2250				
43	MBMG102	Valley	25N 38E 11	07 26 76	Reservoir		Reservoir is drained, alkali below dam			no	2250				
44	MBMG103	Valley	25N 38E 10	07 26 76	Creek		Used as a stock reservoir		30	no	2250				
45	MBMG76	Valley	25N 36E 05 BBD	07 27 76	Creek	2 gpm (E)	Drains into Triple Crossing Reservoir, algal sample taken	9910	23	no	2450				
46	MBMG75	Valley	26N 36E 28	07 27 76	Reservoir		Triple Crossing Reservoir, some salts below dam	1780	20	no	2500				
47	MBMG77	Valley	25N 36E 06	07 27 76	Reservoir		Reservoir formed by road	1300	21	no	2480				
48	MBMG85	Valley	25N 37E 01 CCB	07 27 76	Reservoir		Stock reservoir on Lone Tree Creek	1890	20	no	2260				
49	MBMG84	Valley	26N 37E 33 CAD	07 27 76	Reservoir		Gatshot Reservoir, some algae	1110	20	no	2350				
50	MBMG86	Valley	24N 34E 05	07 27 76	Well		Stock use, drinking water is hauled in	5850	18	no	2500		800	211JDRV	
51	MBMG81	Valley	25N 35E 09 DBB	07 27 78	Reservoir		Finale Reservoir, clear water, much moss, salts	3470	24	no	2600				
52	MBMG78	Valley	25N 36E 06	07 27 76	Pond		Seep area below reservoir, white salt crust	7070	21	no	2480				
53	MBMG80	Valley	25N 36E 06	07 27 76	Creek		Salt forms a thick white crust	3410	19	no	2480				
54	MBMG79	Valley	25N 36E 06	07 27 76	Creek		Below pond	5680	19	no	2480				
55	MBMG82	Valley	25N 35E 09	07 27 78	Pond		Drain pool below Finale Reservoir	3820	22	no	2640				
56	MBMG83	Valley	26N 35E 28 CCA	07 27 76	Spring		Domestic use except for drinking	1070	12	no	2650				
57	MBMG107	Valley	26N 40E 19	07 26 76	Reservoir		Reservoir contains much moss	210	26	no	2400				
58	MBMG104	Valley	24N 38E 14	07 26 76	Creek		Deep pool in bottom of drycreek, algal sample taken	12890	23.5	no	2400				Stebley
59	MBMG105	Valley	25N 38E 17	07 27 76	Creek			1090	21	no	2250				

JORDAN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 26°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
60	MBMG106	Valley	25N 39E 18 D	07 27 76	Reservoir			1130	28	no	2400				
61	MBMG100	Valley	26N 39E 27	07 26 76	Reservoir		Stock use, muddy	200	24	no	2300				
62	MBMG105B	Valley	24N 38E 19	07 26 76	Spring		Domestic use	1060	10	no	2200				Munger, A
63	MBMG112	Valley	27N 42E 22	07 26 78	Well		Stock use	4830	12	no	2050		30		Rorvick, J.
64	MBMG89	Valley	24N 36E 23	07 26 76	Reservoir			260	28	no	2500				
65	MBMG88	Valley	24N 37E 12	07 26 76	Pond			25400	30	no	2400				
66	MBMG91	Valley	24N 36E 30	07 26 78	Creek			8670	24	no	2500				
67	MBMG90	Valley	24N 36E 21	07 28 76	Pond			180	30	no	2600				Handley
68	MBMG92	Valley	22N 35E 04 DCCD	07 26 76	Spring			1447	9	yes	2900				Burke, D.
69	MBMG87	Valley	24N 37E 06 BCAA	07 26 76	Pond			6720	27	no	2350				
70	MBMG94	Valley	23N 35E 10	12 18 76	Spring			1882	7	yes	2850				Burke, D
71	MBMG116	Phillips	26N 29E 26	07 23 76	Creek		Beaver Creek, salts present	2800	31	no	2480				
72	71M5002	Valley	23N 41E 04 DC	07 30 71	Well			66000		yes	2490			331CRLS	
73	26M0002	Valley	15N 30E 21 CA	01 06 26	Well		Mosby dome - Cat Creek oil field			yes	2427			217LKDT	

JORDAN

Chemical Analyses

Map ref. no.	T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
1	16N	32E	21	CB	03	17	78	Creek	35.7	11.2	220	4.4				218		3.5	416
11	19N	34E	32	BDC	04	25	69	Well	500	120	1600*					560		2000	1800
12	19N	34E	32	BDC	04	29	69	Well	390	69	1300*					450		1500	1800
13	18N	40E	09	DB	03	17	76	Creek	31.5	12.4	225	4.5				275		6.5	370
17	18N	36E	28	CA	09	14	53	Well	480	90	1500*					523		1600	2300
20	15N	33E	02	AA	03	17	78	Creek	43.4	23.4	67	9.6				257		13	125
23	22N	44E	18	BB	01	11	66	Well	370	76	2300*					296	37	1500	3700
68	22N	35E	04	DCCD	07	26	78	Spring	31.9	24.8	300	1.9	.10	.92	11.4	871		14	86.1
70	23N	35E	10	BCAA	12	18	76	Spring	15	6.6	445	2.0	.23	.03	11.4	853		11.5	300
72	23N	41E	04	DC	07	30	71	Well	44	5.9	1900*					490		560	2900
73	15N	30E	21	CA	01	08	26	Well			850*					938		750	13

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated
* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

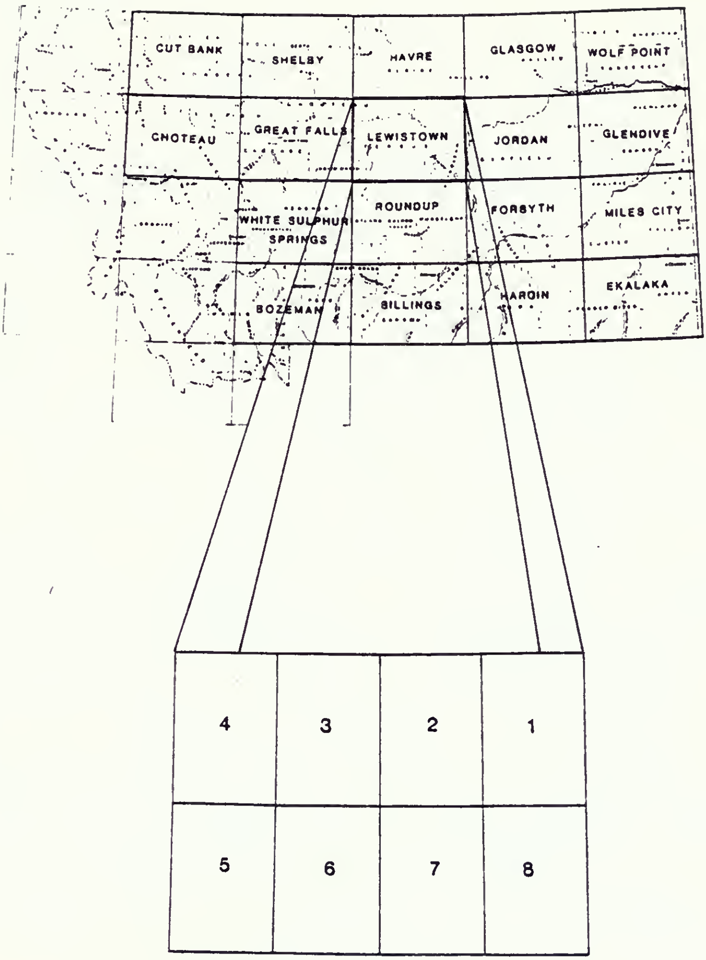
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. °C	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
1	.07		7.9	3.2	1190		135	111	8.2	WQB			no	76W0492
11			7.1				1740	459		Unknown		331CRLS	no	69M0011
12			7.3				1260	369		Unknown		337MSNC	no	69M0010
13	.23		8.2	2.5	1272		130	225	8.6	WQB			no	76W0490
17							1570	429		Unknown		331CRLS	no	53M0001
20	.06		7.63	2.3	684		205	211	2.0	WQB			no	76W0491
23			8.8				1240	304		Unknown		331CRLS	no	66M0027
68	.095	.5	7.74	9	1447	901	182	714	9.7	MBMG		211HLCK	yes	76M1504
70	.357	.3	8.19	7	1882	1213	65	700	24.1	MBMG		211FXHL	yes	76M1505
72			7.8		56000		134	402		Unknown		311CRLS	no	71M5002
73								769		Unknown		217LKOT	no	26M0002

JORDAN 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T	R	Sec	Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (μg/l)	Beryllium (μg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (μg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (μg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
68	22N	35E	04	DCCD	.06	<.2	<2.0		.22		<.01	.01	<.05	.05	<.3	<.01	.016	<2.0		.21	.16	1.43	76M1504
70	23N	35E	10	BCAA	.05	<.2	<2.0		.30		<.01	<.01	<.05	.15	<.3	.01	.016	<2.0		.20	.17	.01	76M1505

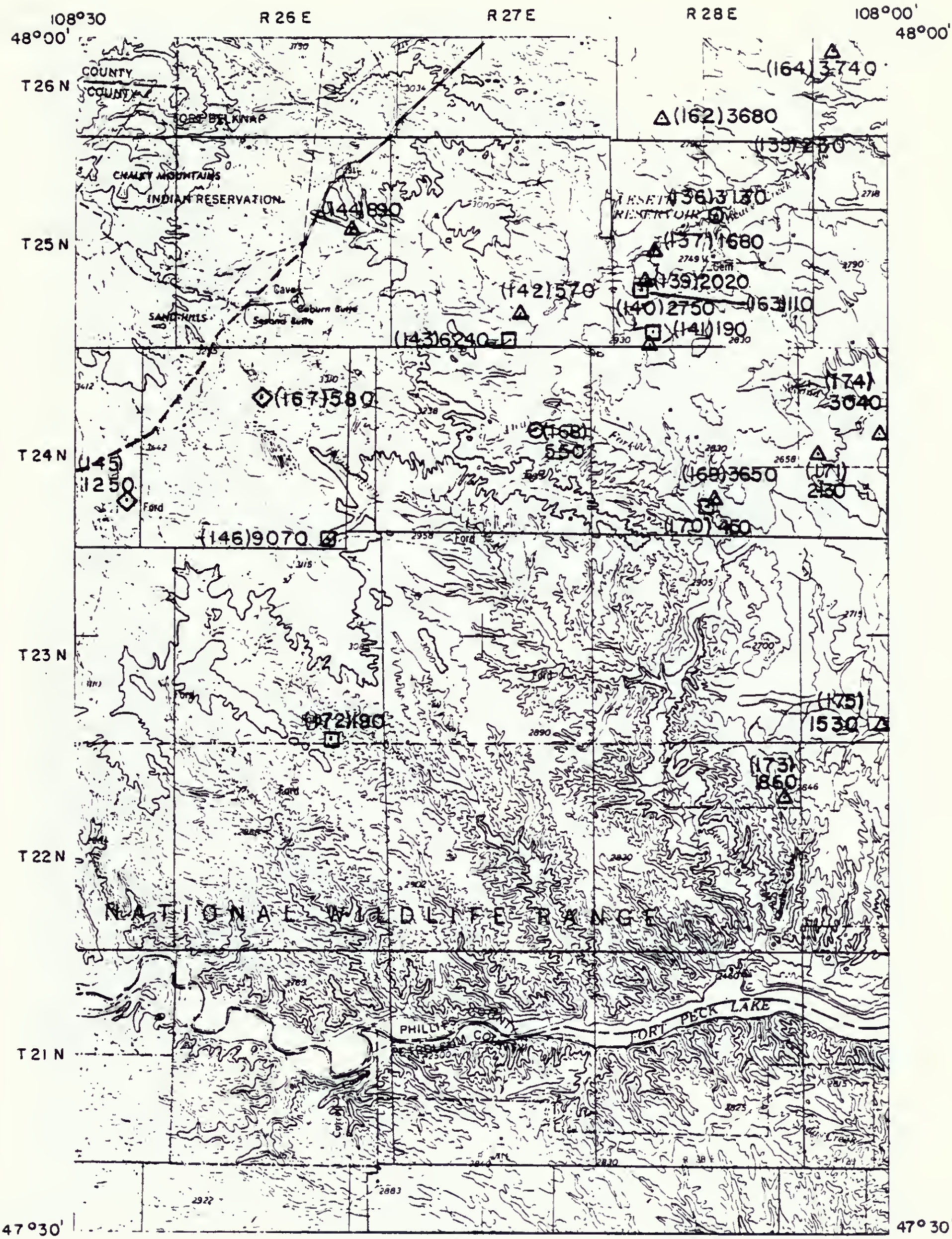
LOCATION BASE MAP



LEWISTOWN 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

LEWISTOWN 1

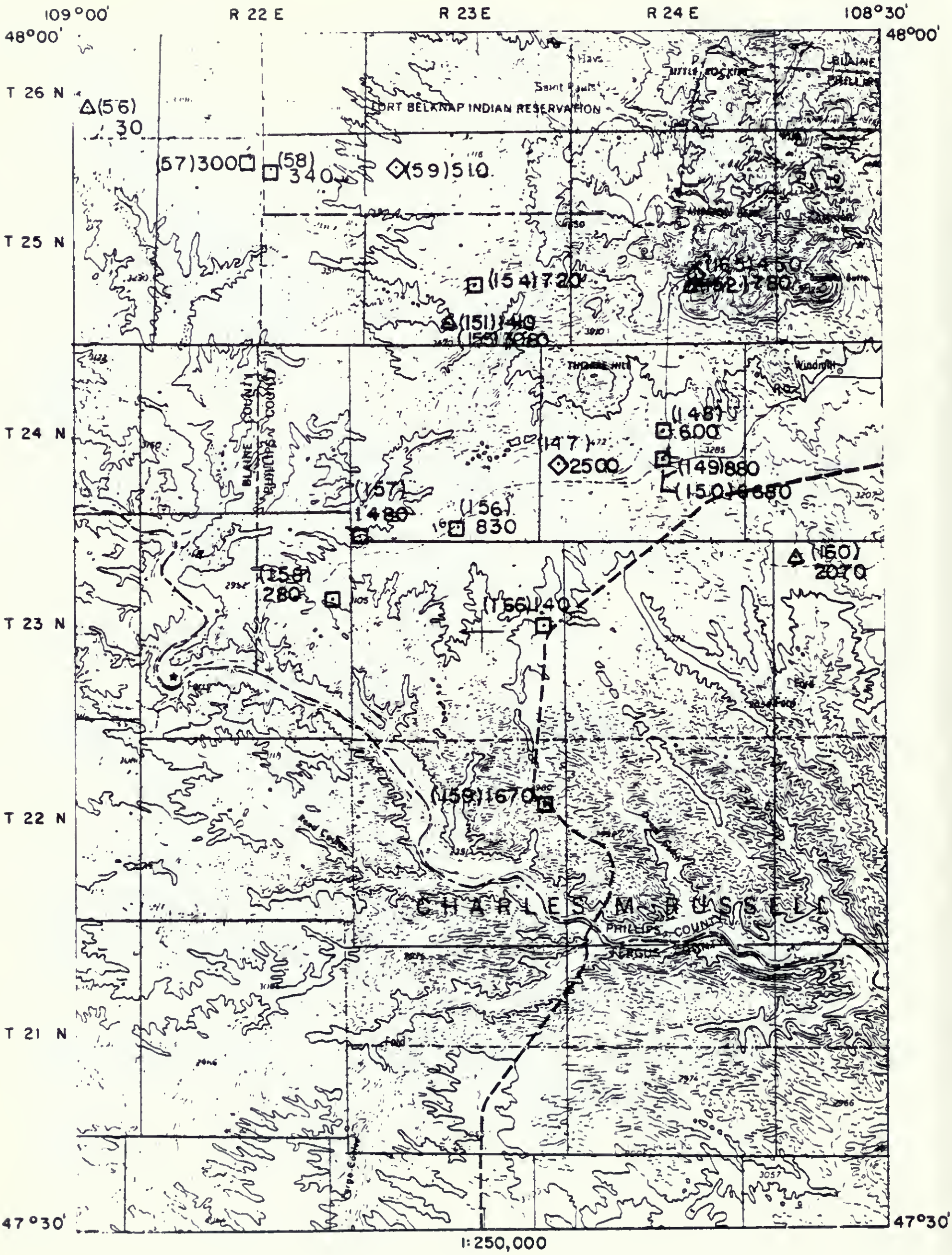


1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



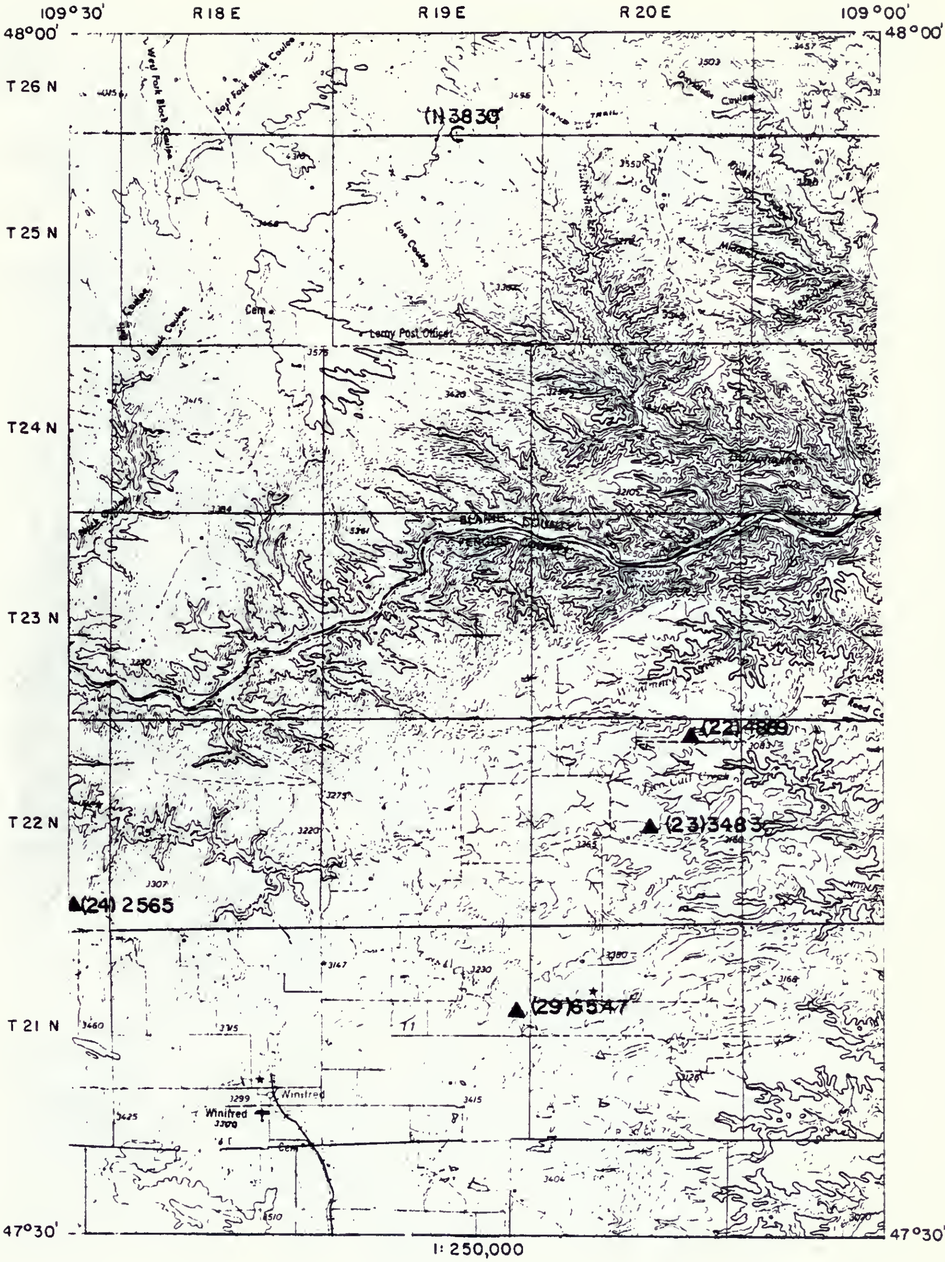
1:250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



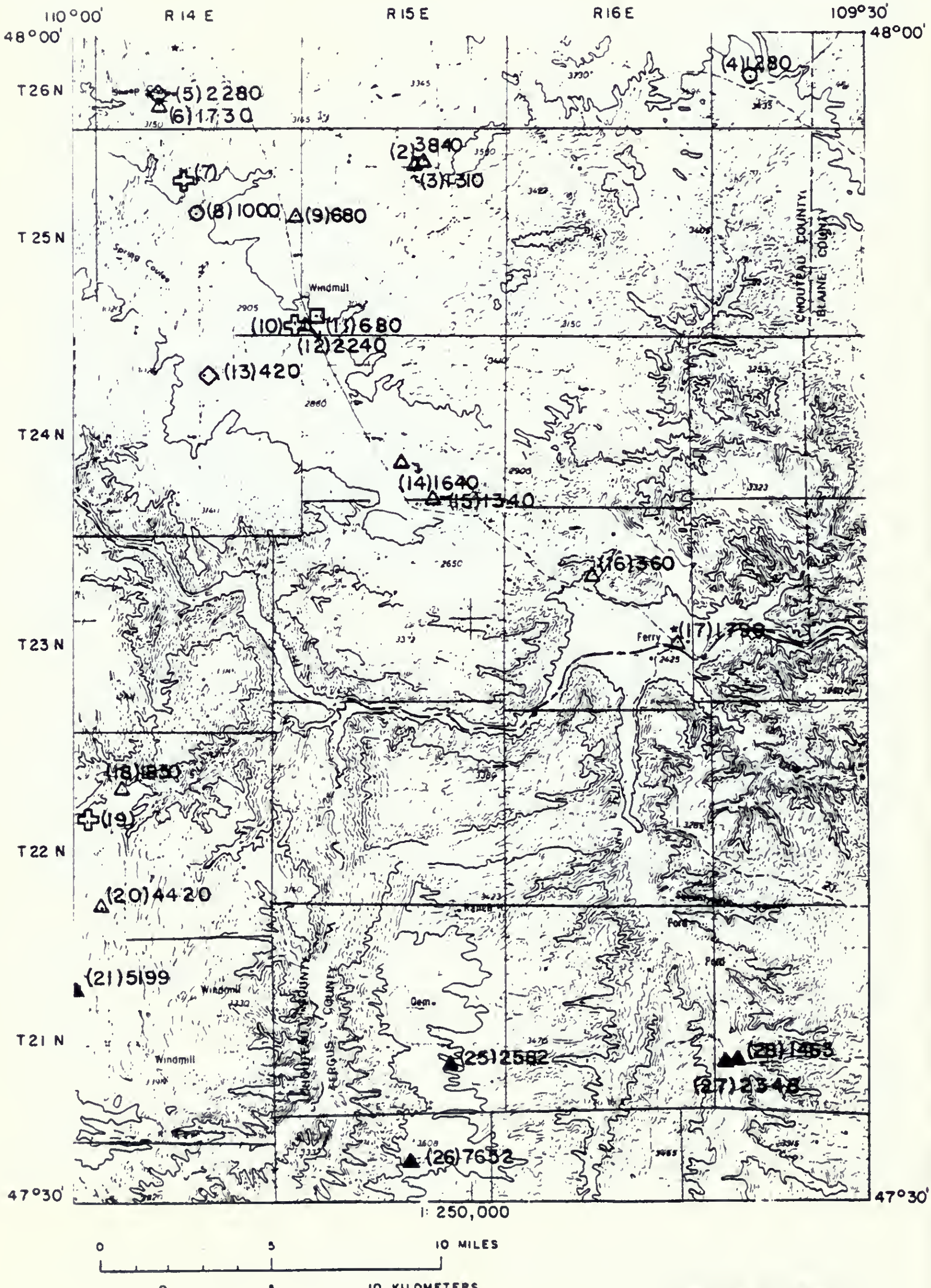
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

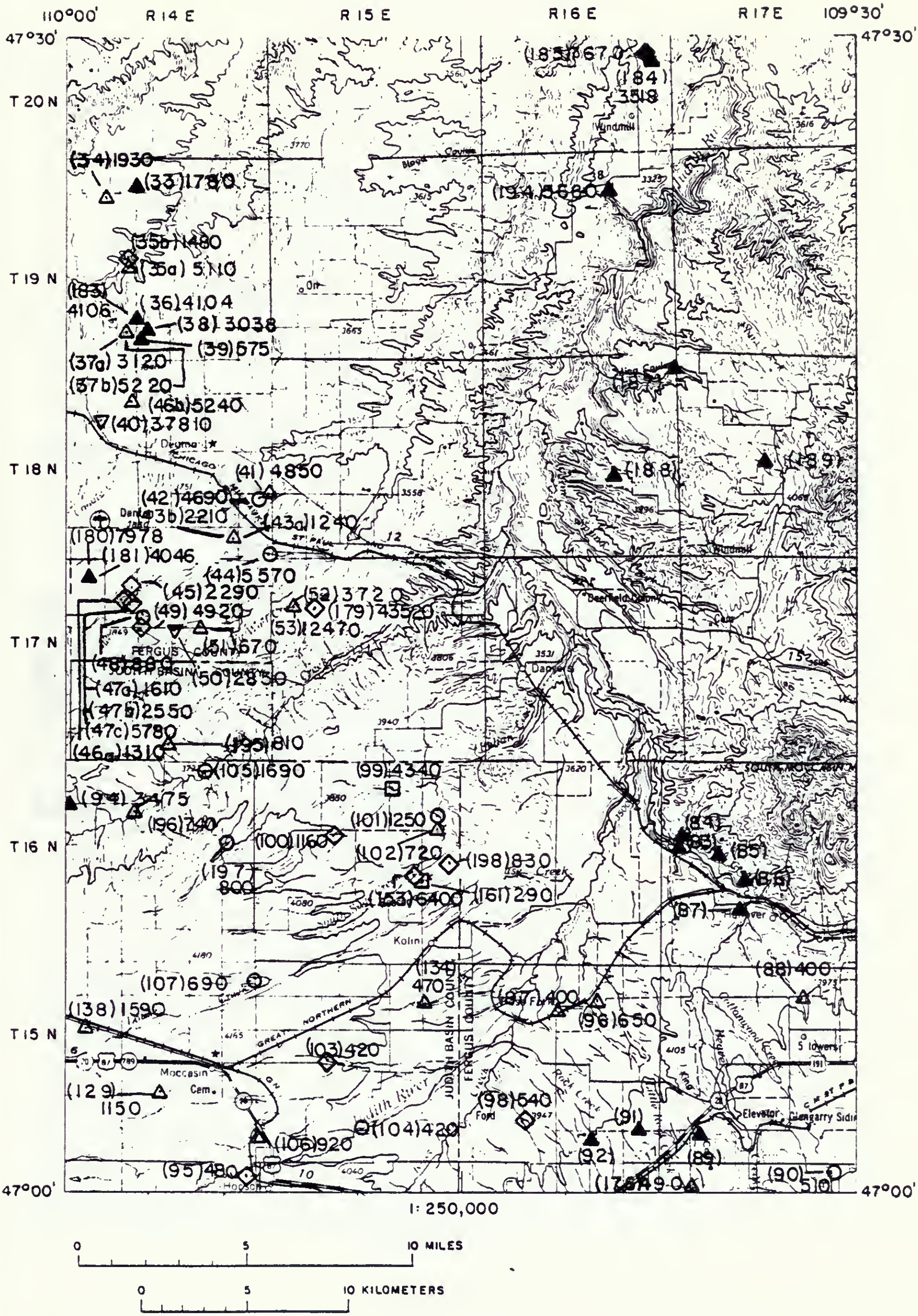
SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

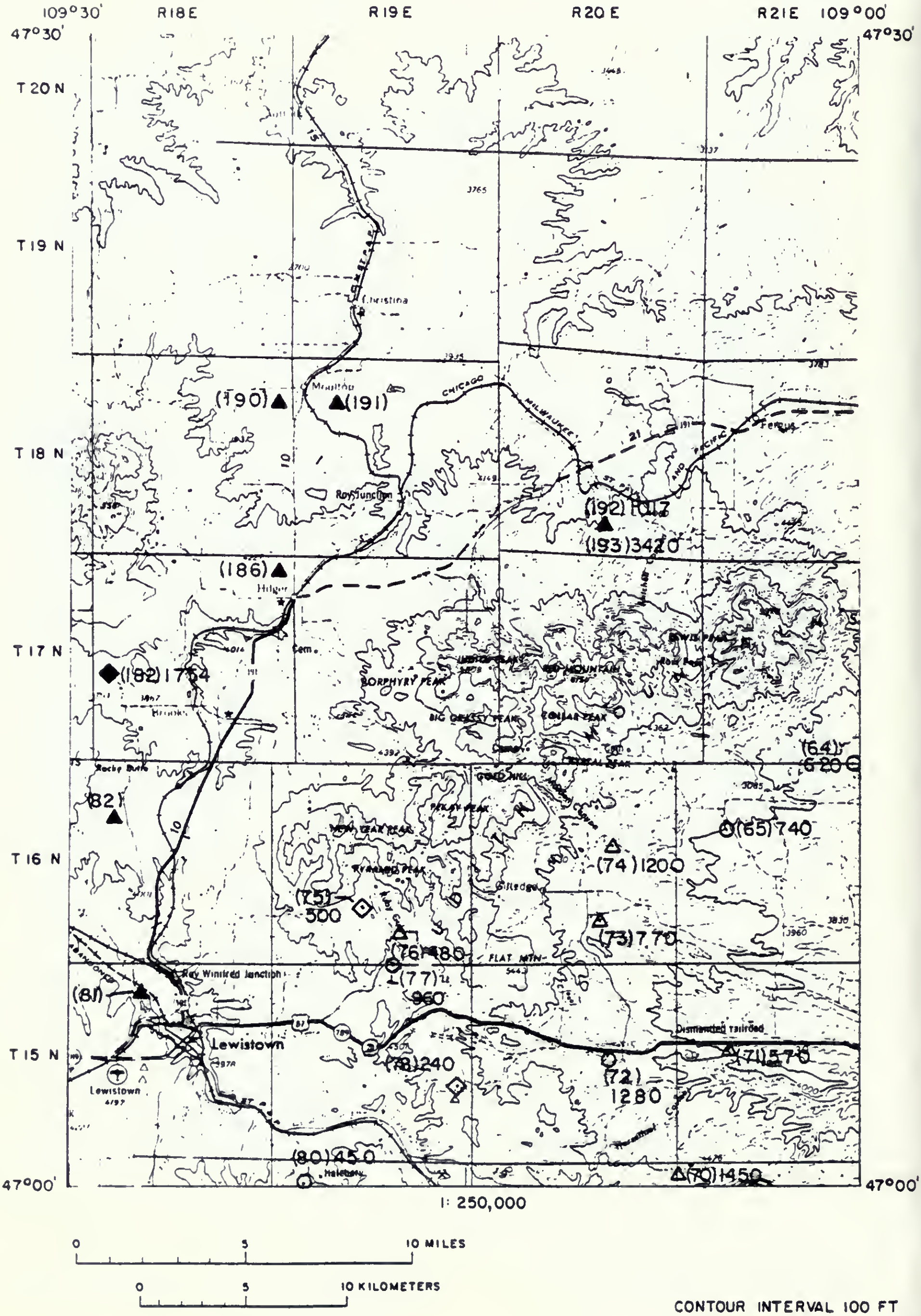
SPECIFIC CONDUCTANCE SURVEY

LEWISTOWN 5

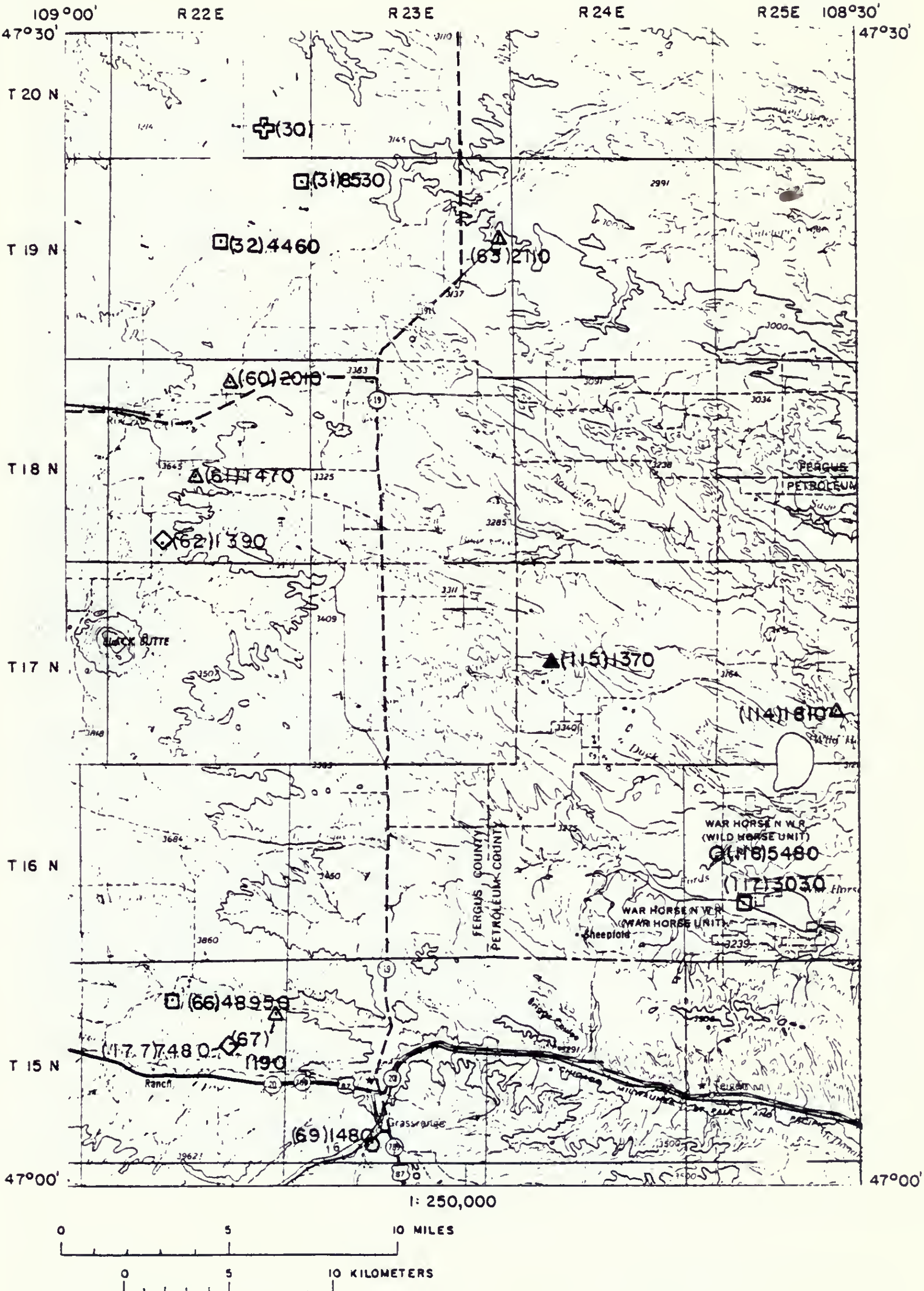


CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



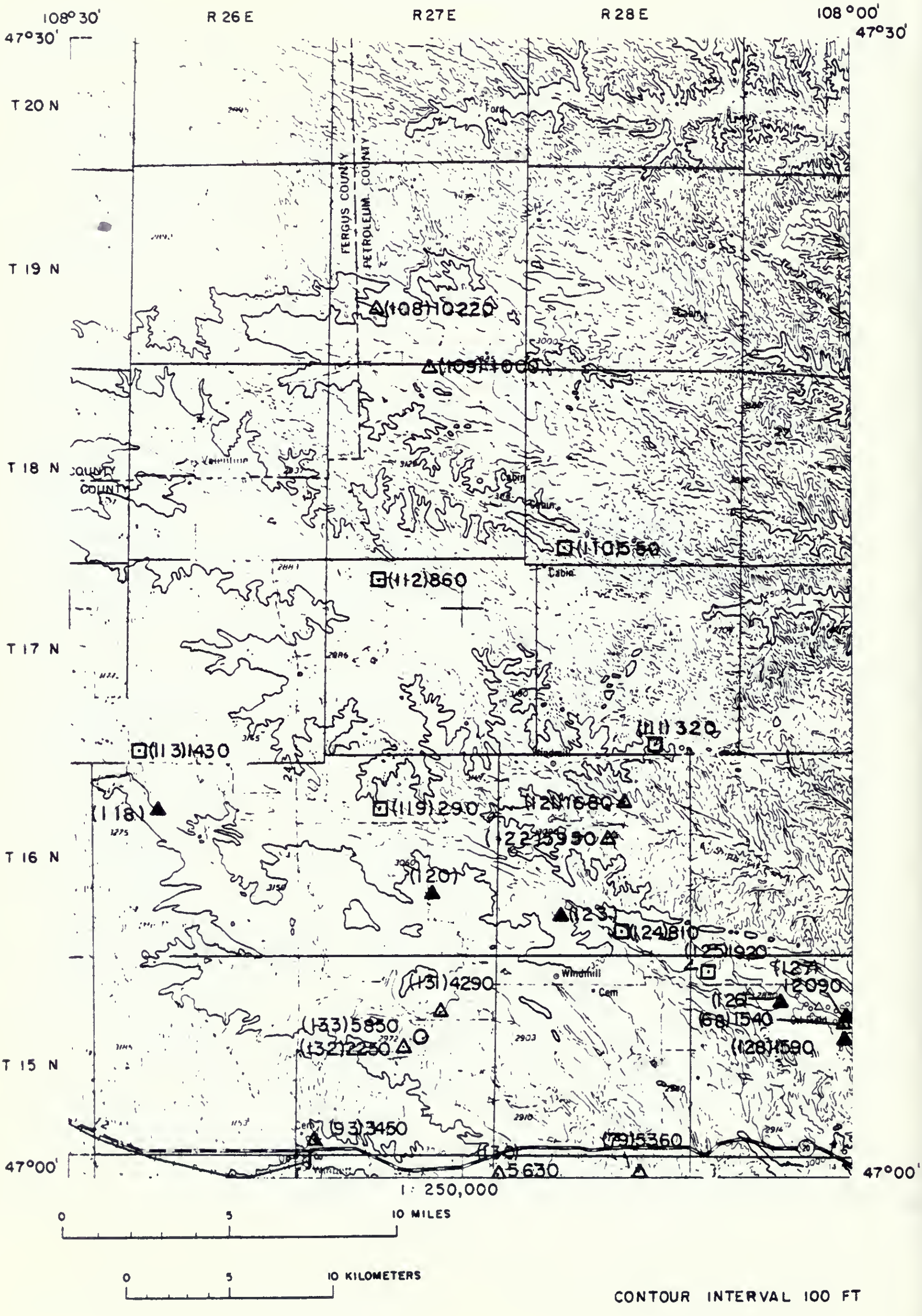
SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

LEWISTOWN 8



LEWISTOWN 1° x 2° Sheet

Specific Conductiei̇ty Invnetory Sheet

Map rel. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG26	Blaine	26N 19E 34 DDC	07 08 78	Creek	0.3 gpm	Bushwacker Coulee, algal sample taken	8830	22	no					
2	MBMG74	Choteau	25N 15E 03 DCB	08 08 78	Well	2.5 gpm	Stock use	3840	9	no	3320	35	115		Cook, Richard
3	MBMG75	Choteau	25N 15E 03 CDD	08 08 76	Well	5 gpm	Domestic use	1310	13	no	3320		32		Cook, Richard
4	MBMG73	Choteau	26N 17E 29 BCC	08 10 76	Creek	6 cfs	Willow trees along banks	1280	18	no	3400				
5	MBMG76	Choteau	26N 14E 32 AAC	08 06 78	Spring	0.25 cfs	On Sheep Coulee	2280	8.5	no	3120				Butler, E. C.
6	MBMG77	Choteau	26N 14E 32 ADB	08 08 78	Well		Domestic use, water forms white deposits on fixtures	1730	18	no	3120	54	84		Butler, E. C.
7	MBMG78	Choteau	25N 14E 09	08 06 76	Seep		0.5 acre in size			no	3100				
8	MBMG79	Choteau	25N 14E 16 ADB	08 06 76	Creek	1 cfs	Eagle Creek	1000	20	no	2900				
9	MBMG80	Choteau	25N 14E 13 ADC	08 06 76	Well		Domestic use, water leaves rust stains	680	17	no	3100	7	35		Yirsa
10	MBMG81	Choteau	25N 14E 36	08 06 76	Seep		0.5 acre in size			no					
11	MBMG83	Choteau	25N 15E 31 CBA	08 06 78	Reservoir		In a wheat field	680	19	no	2950				Beeler, Louis
12	MBMG82	Choteau	25N 15E 31 CCB	08 06 76	Well		Domestic use, water forms white deposits on fixtures	2240	15	no	2950		90		Beeler, Louis
13	MBMG159	Choteau	24N 14E 10 BCBA	08 08 76	Reservoir		In wheat field, moss and vegetation in reservoir	420	20	no	2850				
14	MBMG160	Choteau	24N 15E 21 DDAC	08 06 78	Well	20 gpm	Domestic use, water is rusty, forms white deposits	1640	14.6	no	2900	22	28		Orga, Frank
15	MBMG187	Choteau	23N 15E 03 BAAC	08 06 76	Well		Domestic use, water is rusty colored	1340	12	no	2940	4			Hoge
16	MBMG168	Choteau	23N 16E 15 BBBC	08 06 78	Well		Stock use	390	15	no	2490				
17	MBMG169	Choteau	23N 16E 25 BAAA	08 06 76	Well	19 gpm	Domestic use, water leaves iron deposits on fixtures	1790	14	no	2440		25		
18	MBMG174	Choteau	22N 14E 08 CAAA	08 05 76	Well		Domestic use	1830	13	no	3020				Mittal
19	MBMG175	Choteau	22N 14E 18	08 06 78	Seep		Approximately one acre in size			no					
20	MBMG176	Choteau	22N 14E 30 BCA	08 06 76	Well		Domestic use except for drinking	4420	18	no	3390	10	15		Cartwright, B.
21	MBMG190	Choteau	21N 14E 07 BCDC	01 16 76	Well		Stock use, water contains alkali	5199	8	yes	3220	114	120		Dostal, Elmer
22	76M1254	Fergus	22N 20E 02	09 23 76	Well		Domestic use, water contains natural gas	4889	12	yes	3080		360	211JDRV	Ford, Tom
23	76M1255	Fergus	22N 20E 22 B	08 23 76	Well		Domestic use, located 18 miles NE of Winifred	3483	17	yes	3360				Obie, Ken
24	76M1253	Fergus	22N 17E 35 AC	09 22 76	Well	3 gpm	Domestic use, hand dug well	2665	14	yes	3350				Heggen
25	76M1250	Fergus	21N 15E 26 CA	09 22 78	Well	1 gpm (E)	Domestic and stock use	2582	10.5	yes	3600		20		Martin, Melvin
26	76M1249	Fergus	20N 15E 10 AC	09 22 78	Well	3 gpm	Used for watering lawn	7652	12	yes	3610		23		Ellis, Floyd
27	76M1252	Fergus	21N 17E 30 CA	09 22 78	Well	5 gpm (E)	Domestic use	2348	13	yes	2800		300		Boyce, Merle
28	76M1251	Fergus	21N 17E 30 DBA	09 22 78	Well		Domestic use, located 10 miles W of Winifred	1483	17	yes	2820		90		Demers, Tom
29	76M1256	Fergus	21N 19E 13	09 23 78	Well		Domestic use	6547	13	yes	3200			211JDRV	Johnston, Greg
30	MBMG60	Fergus	20N 22E 36	09 13 76	Seep		Located in a fallow field, seep 2 acres in size			no	3160				

LEWISTOWN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	MBMG61	Fergus	19N 22E 01	09 13 76	Reservoir		Stock use	8530	18	no	3100				
32	MBMG59	Fergus	19N 22E 15	09 13 76	Reservoir		Stock use, surrounded by seep	4460	20	no	3120				
33	72M0001	Fergus	19N 14E 05 DDA	11 16 71	Well		Domestic and stock use	1780	17	yes	3570		120	211EGLE	Campbell, Ben
34	MBMG83	Fergus	19N 14E 08 BB	09 76	Well		Stock use	1930	11	no	3550				Campbell, Ben
35A	MBMG80	Fergus	19N 14E 20 A	09 76	Well		Unused	6110	13	no	3500		15		
35B	MBMG81	Fergus	19N 14E 20 A	09 75	Spring		Stock use	1480	14.9	no	3500				
36	76M1246	Fergus	19N 14E 28 CCCB	09 21 76	Well		Unused, Barber test site BA-3, D-59	4104	15	yes	3800	6	27		Barber
37A	MBMG78	Fergus	19N 14E 32 AB	09 76	Well		Domestic use except for drinking	3120	15.5	no	3800		300		Barker, Nolan
37B	MBMG79	Fergus	19N 14E 32 AB	09 76	Well		Stock use only	5220	10	no	3800		98		Barker, Nolan
38	75M1245	Fergus	19N 14E 33 BBB	09 21 76	Well		Unused, Barber test site BA-6, D-58	3038	9	yes	3800	7	33		Barber
39	76M1244	Fergus	19N 14E 33BCBD	09 21 76	Well		Unused, Barber test site BA-1B, D-57	575	11	yes	3820	17	35		Barber
40	MBMG85	Fergus	18N 14E 07 DDA	09 76	Ditch	no flow	Road ditch	37810	20	no	3780				
41	MBMG65	Fergus	18N 14E 25 AAAA	09 76	Well		Unused	4850	14	no	3600	3	18		Smith, Stephen
42	MBMG66	Fergus	18N 14E 25 ADAA		Coulee	no flow	Ponded water in coulee	4690	24	no	3600				Smith, Stephen
43A	MBMG63	Fergus	18N 14E 35 AD		Well	7 gpm	Domestic use	1240	14.5	no	3850		18		Smith, Stephen
43B	MBMG64	Fergus	18N 14E 35 AD		Well	<7 gpm	Stock use and lawn irrigation	2210	12.5	no	3850	4	18		Smith, Stephen
44	MBMG67	Fergus	18N 14E 36 DD		Creek	1 gpm		5570	15.5	no	3600				
45	MBMG76	Fergus	17N 14E 05 D		Spring	4 gpm		2290	12	no	3850		20		Morris, Edward
46A	MBMG71	Fergus	17N 14E 08 AB		Spring		Domestic use	1310	15	no	3700		20		Morris, Edward
46B	MBMG77	Fergus	18N 14E 08 AA		Well		Domestic use except for drinking	5240	14	no	3700		16		Barber, L. E.
47A	MBMG73	Fergus	17N 14E 08 A		Spring	4 gpm	Stock use	1810	12	no	3700		16		Morris, Edward
47B	MBMG74	Fergus	17N 14E 08 A		Spring	1 gpm		2560	12	no	3700				
47C	MBMG76	Fergus	17N 14E 08 A		Spring	1 gpm		5780	16.5	no	3700				
48	MBMG70	Fergus	17N 14E 09 CB		Coulee	no flow	W of reservoir	860	17	no	3700				
49	MBMG72	Fergus	17N 14E 09 CC		Spring	2 gpm	Stock use	4920	15.5	no	3730				Morris, Edward
50	MBMG69	Fergus	17N 14E 15 BB		Ditch	no flow	Road ditch	2850	17	no	3750				
51	MBMG68	Fergus	17N 14E 15 AA		Well	135 gpm	Domestic use	870	18	no	3700	flowing	1800		Wicken, Francis
52	MBMG87	Fergus	17N 15E 07	09 76	Well	20 gpm	Unused, water has a sulphur smell	3720	16	no	3560	flowing	1712		Morris, Edward
53	MBMG88	Fergus	17N 15E 07	09 76	Well		Unused	12470	16	no	3670				Morris, Edward
54	MBMG11	Blaine	26N 22E 09 ADD	07 07 76	Creek		Pool in creek bed	1170	30.2	no	3010				

LEWISTOWN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
55	MBMG10	Blaine	26N 22E 03 DADB	07 07 76	Reservoir		Small reservoir	250	24.6	no	3120				
56	MBMG9	Blaine	26N 21E 34 AAAD	07 07 76	Well	0.8 gpm	Stock use	30	14	no	3320				Liddle, Frank
57	MBMG8	Blaine	26N 22E 04 ACAD	07 07 76	Reservoir		Large reservoir	300	25.1	no	3380				
58	MBMG7	Blaine	25N 22E 10 BABC	07 07 76	Reservoir		Small reservoir	340	28.5	no	3400				
59	MBMG6	Blaine	25N 23E 07 AABC	07 07 76	Spring	20 gpm (M)	Brochie Spring	510	12.8	no	3490				Hawley, David
60	MBMG58	Fergus	18N 22E 03	09 13 76	Well		Domestic use, water forms white deposits and is corrosive	2010	16	no	3500		12		Siroky, John
61	MBMG46	Fergus	18N 22E 20	09 10 76	Well		Domestic and stock use	1470	14	no	3640		10		Emery, Floyd
62	MBMG47	Fergus	18N 22E 32	09 13 76	Spring		Domestic use	1390	14.5	no	3550				Knox
63	MBMG57	Fergus	19N 23E 13	09 13 76	Well		Domestic and stock use, water forms white deposits	2110	16.5	no	3000		14		Siroky, John
64	MBMG48	Fergus	17N 21E 35 DCC	09 76	Creek			620	15	no	3830				
65	MBMG49	Fergus	16N 21E 08 DCC	09 10 76	Creek			740	16	no	5380				
66	MBMG43	Fergus	15N 22E 09	09 10 76	Reservoir		Abandoned, algal sample taken	48950	26	no	3970				
67	MBMG44	Fergus	16N 22E 12	09 10 76	Well		Domestic use	1190	16	no	3550		780		Fitzgerald, Lester
68	MBMG19	Petroleum	15N 29E 14 AB		Well		Domestic use	1640	17.5	no	2850		1400	211MSBY	Continental Oil Co.
69	MBMG36	Fergus	15N 23E 33	09 09 76	Creek		Backet Creek	1480	18.5	no	3800				
70	MBMG31	Fergus	14N 21E 06 BCDA	09 08 76	Well		Domestic use, water has a high iron content	1450	13.2	no	4190	4	25		Charbonneau, Amos
71	MBMG42	Fergus	15N 21E 17 CDBC	09 10 76	Well		Domestic and stock use, water contains much iron	670	11.6	no	4000		480		Gallas
72	MBMG41	Fergus	15N 20E 15 DDCB	09 10 76	Creek			1280	14	no	4100				
73	MBMG61	Fergus	16N 20E 27 DBCD	09 10 76	Well		Domestic and stock use	770	17	no	4320		400		Poette, George
74	MBMG50	Fergus	16N 20E 14 CABD	09 10 76	Well		Domestic use	1200	16	no	4250		26		Duffy, C. L.
75	MBMG38	Fergus	16N 19E 28 ABDD	09 10 76	Spring		Domestic use	500	14	no	4770				Raitt
76	MBMG37	Fergus	16N 19E 34 ABDA	09 10 76	Well		Domestic use	480	18	no	4520		6		Wicken, James
77	MBMG39	Fergus	15N 19E 03 ABBB	09 10 76	Creek	3 cfs	Boyd Creek	960	14	no	4400				
78	MBMG40	Fergus	15N 19E 24 DBBB		Spring		Domestic use	240	10	no	4700				Heath
79	MBMG19	Petroleum	14N 28E 02		Well		Domestic use, water has a sulphur smell	6360	14	no	2900		1000	211MSBY	Soll
80	MBMG26	Fergus	14N 19E 06 CCAB	09 19 76	Creek	8 cfs		460	13.6	no	4170				
81	64M0019	Fergus	15N 18E 09 BBA	03 29 67	Well	60 gpm (M)	Stock use		10	yes	4000		614	217KDTN	Cline, Earl
82	64M0019	Fergus	16N 18E 08 CAD	04 06 67	Well		Stock use		8.3	yes	4160	80	1100	217KDTN	Phillips, Robert
83	64M0006	Fergus	16N 17E 18 BDD	04 04 67	Well	100 gpm (M)	Rocks in area stained red from this water		16.6	yes	3530		1240	217KDTN	Hutterite Colony
84	64M0011	Fergus	16N 17E 18 BAD	04 04 67	Well	1 gpm (E)	At Spring Creek Hutterite Colony			yes	3620		311	211CLRD	

LEWISTOWN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

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85	64M0016	Fergus	18N 17E 17 BCD	04 04 87	Well	1 gpm (E)	Located 3.1 miles NW of Hanover			yes	3810		1100	217KOTN	Hutterite Colony
86	64M0018	Fergus	16N 17E 21 ADD	03 29 67	Well	4.5 gpm (M)	Located 1.4 miles NW of Hanover		11.1	yes	3400		290	217KOTN	Brevig, C
87	64M0024	Fergus	16N 17E 28 ABB	03 29 67	Well	10 gpm (M)	Water contains enough fluoride to mottle teeth		8.4	yes	3680	flowing	850	217KOTN	Anderson, P
88	MBMG56	Fergus	15N 17E 02 CDCC		Well		Domestic use, water smells of sulphur	400	13	no	3980				Jenn, Gerry
89	64M0015	Fergus	15N 17E 32 BBD	03 29 67	Well	13 gpm (M)	Seismic shot hole converted to a water well		8.3	yes	4090	flowing	42	211CLRD	Yeager, J.
90	MBMG20	Fergus	14N 17E 01 DDDA		Creek	.75 cfs	Cottonwood Creek	510	10	no	4220				
91	64M0022	Fergus	15N 15E 25 CDD	03 29 67	Well	27 gpm (M)	Domestic and stock use		14.4	yes	4060	flowing	1596	217KOTN	Wichman, J
92	64M0023	Fergus	15N 15E 34 ADD	03 29 87	Well	30 gpm (M)			15.1	yes	4030		1470	217KOTN	Wichman, W
93	MBMG6	Petroleum	15N 27E 31 C		Well		Domestic use	3450	17	no	3000				Bauer
94	76M1240	Judith Basin	15N 14E 07 BDAA	09 21 75	Well		Unused, Holzer test site	3475	15	yes		8	28	211CLRD	Holzer
95	MBMG81	Judith Basin	14N 14E 02 ACDB		Spring		Located 20 feet S of house	480	12	no	4120				Puring
96	MBMG54	Fergus	15N 15E 11 BBBD	09 10 75	Well		Domestic use, water produces slight rust stains	650	12.5	no	3800	3	10		Ellison, R
97	MBMG53	Fergus	15N 16E 09 ADDD	09 10 76	Well		Domestic use	400	15	no	3790	9	50		Martin
98	MBMG52	Fergus	15N 16E 29 DADC		Spring	1 gpm	Domestic use	540	13.5	no	3880				Posisil, George
99	MBMG43	Judith Basin	16N 15E 02 CCBB	09 76	Pond		Contains much vegetation	4340	20	no	3730				
100	MBMG42	Judith Basin	16N 15E 15 BCAA		Spring	0.5 gpm	Stock use	1160	18	no	3940	8			
101	MBMG45	Judith Basin	16N 15E 12 CA		Creek		Indian Creek	1250	18	no	3690				
102	MBMG44	Judith Basin	16N 15E 13 BABA		Well		Domestic use	720	18.5	no	3720	flowing	2600		Wrobetz, Larry
103	MBMG56	Judith Basin	15N 16E 16 CDDA		Spring	4 gpm	Discharges to an unnamed creek	420	12	no	4000				Demars, P.
104	MBMG59	Judith Basin	15N 15E 27 CDDA		River	45 cfs	Judith River	420	19	no	3940				
105	MBMG40	Judith Basin	16N 14E 02 BDAD		Creek	5 cfs	Sage Creek	1690	18	no	3700				
106	MBMG60	Judith Basin	15N 15E 31 BCCC		Well		Domestic use, water is hard	920	13	no	4060	6	12		
107	MBMG52	Judith Basin	15N 14E 01 ADDD		Creek	1 cfs	Contains much aquatic vegetation	890	18.6	no	4050				
108	MBMG04	Petroleum	19N 27E 29		Well		Abandoned	10220	14	no	2950				Iverson, Lee
109	MBMG03	Petroleum	18N 27E 03 BB		Well		Abandoned, water smells of sulphur	1000	12.2	no	2850				Iverson, Lee
110	MBMG02	Petroleum	18N 28E 31		Reservoir			550	17	no	3000				
111	MBMG01	Petroleum	17N 28E 34		Reservoir			320	15.8	no	3000				
112	MBMG05	Petroleum	17N 27E 05		Pond	no flow		860	14	no	2880				
113	MBMG14	Petroleum	17N 26E 31 C		Reservoir		Stock use	1430	16	no	3100				
114	MBMG13	Petroleum	17N 25E 27		Well	15 gpm	Domestic use	1810	12	no	3050	45	120		Lewis

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115	63M0009	Petroleum	17N 24E 17 CC	07 10 83	Well		Located 38 miles NE of Lewistown	1370		yes	3100		3221	337MSNC	
116	MBMG11	Petroleum	16N 25E 18 DA		Creek		Fords Creek	5480	16	no	2890				
117	MBMG12	Petroleum	16N 25E 29 A		Lake		War Horse Lake	3030	16	no	3250				
118	46M0016	Petroleum	16N 26E 08 AD	03 16 46	Well		Located 1 mile NE of War Horse Lake			yes	3100			320TSLP	
119	MBMG10	Petroleum	16N 27E 09		Reservoir		Stock use	290	14	no	2900				
120	46M0014	Petroleum	16N 27E 26 BB	03 05 48	Well		Located 12 miles E of War Horse Lake			yes	2840			217LKOT	
121	MBMG23	Petroleum	16N 28E 10 AD		Well		Domestic use	1680	12	no	2900		106		Pease, Joe
122	MBMG22	Petroleum	16N 28E 15		Spring		Stock use, alkali below	5950	10.8	no	2910				Pease, Joe
123	28M0001	Petroleum	16N 28E 28 CC	04 28	Well	32 gpm (M)	Located 18 miles E of War Horse Lake			yes	3050			217KOTN	
124	MBMG21	Petroleum	16N 28E 34 AD		Reservoir		Stock use	810	15	no	2900				
125	MBMG20	Petroleum	15N 29E 06		Reservoir		Stock use, salts below dam	1920	10.8	no	2880				
126	26M0001	Petroleum	15N 29E 09 AC	01 07 28	Well		Located 24 miles SE of War Horse Lake			yes	2850			217KOTN	
127	68M0008	Petroleum	15N 28E 11 DD	10 14 68	Well			12090		yes	2810			337MSNC	
128	68M0003	Petroleum	15N 29E 14 AD	12 04 68	Well		Located 28 miles SE of War Horse Lake	1690		yes	2850			217LKOT	
129	MBMG57	Judith Basin	16N 14E 22 CCCC		Well		High water table	1150	14	no	4210		<15		Heintz, Marvin
130	MBMG17	Petroleum	14N 28E 06 C		Well	35 gpm	Domestic use, water is corrosive	5630	12.5	no	2980	2	125		Bohn
131	MBMG9	Petroleum	15N 27E 11 CA		Well	30 gpm	Stock use	4290	17	no	2900	125	200		Kipl, Vick
132	MBMG7	Petroleum	15N 27E 15 C		Well		Domestic use except for drinking	2560	22	no	2880		250		Stew, Gene
133	MBMG8	Petroleum	15N 27E 15		Creek	5 cfs	Box Elder Creek	5850	14	no	2870				
134	MBMG54	Judith Basin	15N 15E 11 AADA				Domestic use, water leaves white deposits on faucets	470	12	no	3920		35		Stevenson
135	MBMG121	Phillips	25N 29E 01	07 23 76	Reservoir		Stock use	230	25	no	2600				
136	MBMG122	Phillips	25N 28E 15 BCA	07 23 78	Creek		Beaver Creek	3130	23	no	2590				
137	MBMG123	Phillips	26N 28E 20 BDB	07 23 78	Well	3 gpm		1680	18	no	2750	flowing			
138	MBMG53	Judith Basin	15N 14E 07 ABAD		Well		Domestic use, water leaves white deposits on faucets	1690	12.5	no	4260				Hajenga, I.
139	MBMG126	Phillips	25N 29E 29 BBB	07 23 76	Well		Domestic use, seep nearby	2020	18	no	2900	44	470		Cummings, R.
140	MBMG127	Phillips	25N 28E 32 CCO	07 23 78	Well		Domestic and stock use	2750	11	no	2910	200	800		Milks, B.
141	MBMG128	Phillips	25N 29E 32 CCA	07 23 78	Pond		Muddy	190	23	no	2910				Milks, B.
142	MBMG120	Phillips	26N 27E 34 CCCB	07 24 76	Reservoir		Stock use, large seep nearby	670	26	no	2820				
143	MBMG119	Phillips	26N 27E 34 BAD	07 24 78	Well		Water is not used for drinking	8240	15	no	2780	200	900		Strand, Clift
144	MBMG118	Phillips	25N 26E 14 DA	07 24 76	Well			890	14	no	2980				Itcaina

LEWISTOWN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or Yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
145	MBMG161	Phillips	24N 25E 25	07 24 78	Well	5 gpm	Domestic and stock use	1750	15	no	3130				Cattle Co.
146	MBMG159	Phillips	24N 26E 36	07 24 76	Pond		Natural pond in a coulee bottom	9070	30	no	3000				
147	MBMG156	Phillips	24N 24E 19	07 25 76	Spring		Domestic use, water has a soda taste	2500	25	no	3750				Williams
148	MBMG157	Phillips	24N 24E 15	07 25 76	Reservoir	no flow	Stock use, reservoir surrounded by seep	600	25	no	3320				
149	MBMG158	Phillips	24N 24E 22	07 25 76	Pond		Salts on bank below reservoir	880	29	no	3280				
150	MBMG159	Phillips	24N 24E 22	07 25 76	Pond		Salt crust around entire pond	6680	25	no	3780				
151	MBMG152	Phillips	25N 23E 23	07 25 75	Well	10 gpm	Not used for drinking	1410	10	no	3500	40	60		Mitchel, V. C.
152	MBMG153	Phillips	25N 24E 27	07 25 76	Well	30 gpm	Domestic use	780	10	no	4000	15	170		Kolozak, G.
153	MBMG48	Judith Basin	16N 15E 23 ADCD		Spring		Stock use, spring is directly below reservoir	6400	18	no	3820				
154	MBMG166	Phillips	25N 23E 27 BCA	07 25 76	Reservoir		Stock use	720	27	no	3600		15		
155	MBMG151	Phillips	25N 23E 33 ACB	07 25 75	Well	3 gpm	Not used for drinking	3080	6.5	no	3600	10	30		Mitchel, V.
156	MBMG155	Phillips	24N 23E 34	07 24 76	Reservoir		Stock use, seep downstream from dam	830	23	no	3100				
157	MBMG160	Phillips	24N 23E 31	07 24 76	Reservoir		Stock use	1480	25	no	3200				Robinson, D.
158	MBMG162	Phillips	23N 22E 13	07 24 76	Reservoir		Stock use, seep downstream from dam	280	23	no	3000				
159	MBMG165	Phillips	22N 23E 12	07 24 76	Pond		Seep nearby	1670	23	no	2850				
160	MBMG164	Phillips	23N 25E 06	07 24 76	Well		Domestic and stock use, water is corrosive	2070	16	no	3040	80	900		Robinson, D.
161	MBMG47	Judith Basin	16N 15E 23 DABD		Reservoir		Stock use	290	17	no	3840				
162	MBMG115	Phillips	26N 28E 32 ACC	07 23 76	Well		Domestic and stock use	3660	17	no	2760	135	750		Trembley, W.
163	MBMG124	Phillips	25N 28E 29 BCA	07 23 76	Reservoir		Stock reservoir	110	26	no	2900				
164	MBMG128	Phillips	26N 29E 19	07 23 76	Well		Domestic and stock use	3740	15	no	2840	325	550		Paigneux, J.
165	MBMG154	Phillips	25N 24E 27	07 25 76	Spring		Used for municipal supply in Zortman	450	16	no	4000				
166	MBMG163	Phillips	23N 23E 13	07 24 76	Reservoir		Stock use	140	22	no	2900				
167	MBMG168	Phillips	24N 26E 10	07 24 76	Spring		Piped 2.5 miles from source	580	14.5	no	3200				Robinson, Jess
168	MBMG170	Phillips	24N 27E 14	07 24 76	Creek	no flow		560	25	no	2780				
169	MBMG171	Phillips	24N 28E 27	07 24 76	Well	12 gpm	Domestic and stock use	3650	16	no	2660	100	900		Jacobs, F.
170	MBMG172	Phillips	24N 28E 27	07 24 76	Reservoir		Stock and garden irrigation use	450	29	no	2660				Jacobs, F.
171	MBMG173	Phillips	24N 29E 19	07 24 76	Well			2130	13	no	2700		26		Knight, W.
172	MBMG176	Phillips	23N 26E 35	07 24 76	Reservoir	no flow	Stock use	190	25	no	2800				
173	MBMG178	Phillips	22N 28E 12 BBD	07 24 76	Well		Domestic use	1860	18	no					
174	MBMG174	Phillips	24N 29E 16 BCD	07 23 76	Well	10 gpm	Water is corrosive, contains salts and soda	3040	16	no	2600	180	690		Blunt, C.

LEWISTOWN 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
175	MBMG177	Phillips	23N 29E 33	07 24 76	Well		Domestic use, water encrusts pipes	1530	14	no	2560				Sandvick, H.
176	MBMG18	Fergus	14N 17E 06 DDAC		Well		Domestic use	490	10	no	4200				Otten, John M.
177	MBMG45	Fergus	15N 22E 14		Spring		Stock use	7480	15	no					
178	not on map														
179	MBMG86	Fergus	17N 15E 07 AD		Spring			43520	15	no					Morris, E.
180	76M0236	Fergus	17N 14E 06	04 09 78	Well		Unused, Melton test area	7978	5	yes		6	54		
181	76M1243	Fergus	17N 14E 06	09 21 78	Well		Unused, Melton test site, M9D53	4046	15	yes		7	63		
182	73M0845	Fergus	17N 18E 19	08 17 73	Spring		Brooks warm spring	1754	20	yes	3800			331MDSN	
183	76M0237	Fergus	19N 14E 33 BBCD	04 09 76	Well		Unused, Barber test area D48, BA19-74	4106	12	yes		19	33		
184	76M1238	Fergus	20N 16E 24	09 22 76	Well		Unused	3518	12	yes			40		Gilkey
185	76M1237	Fergus	20N 16E 24 BD	09 22 76	Spring	30 gpm (E)	Unused	7670	16	yes					Gilkey
186	64M0014	Fergus	17N 18E 01 ACC	04 03 67	Well	6 gpm (M)	Domestic and stock use		8.3	yes	3700	40	695	211EGLE	Wichman, E.
187	64M0013	Fergus	18N 16E 01 ADB	04 04 67	Well		Domestic and stock use			yes	4000		174	211EGLE	Devine, H. L.
188	64M0007	Fergus	18N 16E 23 CBD	04 04 67	Well	2 gpm (E)	Stock use			yes	3830	40	300	211EGLE	Conrad, Robert
189	64M0008	Fergus	18N 17E 21 ABC	04 04 67	Well		Domestic use			yes	3900			211EGLE	Hunnewell, A
190	64M0010	Fergus	18N 18E 12 ACA	04 03 67	Well	6 gpm (M)	Domestic and stock use			yes	3770		376	211EGLE	Arntzen, Ken
191	64M0017	Fergus	18N 19E 08 BCD	04 03 67	Well		Domestic and stock use		12.8	yes	3800		651	211EGLE	Benes, W. J.
192	72M0066	Fergus	18N 20E 34 BC	04 10 72	Well		Unused, Mont 26C, USGS well 5-34	1017	26.6	yes	4050			217SCCR	Cardinal Petroleum Co.
193	72M0067	Fergus	18N 20E 34 BC	04 29 72	Well		Unused, Mont 25C, USGS	3420		yes	4060			331MDSN	Cardinal Petroleum Co.
194	72M0002	Fergus	19N 16E 11 BBB	11 16 71	Well		Stock use, Mont 25C, USGS	5680	10.6	yes	3400			211EGLE	Glass, Charles
195	MBMG34	Judith Basin	17N 14E 33 DABB		Well	3.5 gpm	Domestic use, water is soft	810		no	3880		1578		Carver
196	MBMG39	Judith Basin	16N 14E 09 BDDC		Well		Domestic use	740	12	no	3800		1350		Boeck
197	MBMG41	Judith Basin	16N 14E 13 BCDC		Creek	0.25 cfs		800	19	no	3990				
198	MBMG46	Judith Basin	16N 15E 24 ABBA		Spring		Stock use, water contains iron	830	13	no	3860		8		

LEWISTOWN

Chemical Analyses

Map ref no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
71	71N	14E	07	8CDC	01	15	76	Well	340	190	845	11.5	.73	1.28	11.8	553		25	2855
72	72N	20E	02		09	23	76	Well	7.3	1.8	1100	2.8	.25	.01	6.7	544		1445	5.8
73	22N	20E	22	8	09	73	76	Well	5.4	1.5	890	2.3	.12	.01	7.6	1221	13	119.5	766
74	22N	17E	35	DC	09	22	76	Well	233	123	215	3.2	.05	.01	11.5	451		100	964
75	21N	15E	26	CA	09	22	76	Well	82	238	199	1.9	.06	<.01	13.6	616		80	926
76	20N	15E	10	AC	09	22	76	Well	408	780	875	12	.07	.02	15.1	446		116	5270
27	21N	17E	30	CA	09	22	76	Well	2.4	.5	545	1.3	.03	.01	7.5	441	32.6	96.5	637
28	21N	17E	30	D8A	09	22	78	Well	163.5	57.5	94.5	4.1	.03	<.01	7.9	390		13	511
29	21N	19E	13		09	23	76	Well	63	14.9	1630	3.9	.13	.05	7.6	1075		325	2318
33	19N	14E	05	DDA	11	16	71	Well	161	125	107	4.7	.02		16.0	240		16.3	879
36	19N	14E	28	CCC8	09	21	76	Well	424	292	282	9.1	.04	.27	12.7	506		102	2236
38	19N	14E	33	888	09	21	76	Well	394	177	175	7.7	.08	.01	12.8	407		104	1497
39	19N	14E	33	CBD	09	21	76	Well	66	29	15.2	1.5	.14	<.01	13.3	334		8.4	33.2
81	16N	18E	09	88A	03	29	67	Well	39	19	66*					281		4	54
82	16N	18E	08	CAD	04	05	67	Well	63	29	60*		.44			403		4	38
83	16N	17E	18	8DD	04	04	67	Well	8	4	262*		.26			323		12	316
84	16N	17E	18	8AD	04	04	67	Well			812*		.24			872		23	910
85	16N	17E	17	8CD	04	04	67	Well	8	4	251*		.08			317		11	294
66	16N	17E	21	ADD	03	29	67	Well	48	18	117*					311		8	176
87	16N	17E	28	A88	03	29	67	Well	4		164*		.15			384		6	41
89	15N	17E	32	88D	03	29	67	Well	65	42	39*					238		14	192
91	15N	16E	25	CDD	03	29	87	Well	28	15	82*					293		4	60
92	15N	16E	34	ADD	03	29	67	Well	4		159*					335		4	51
94	16N	14E	07	8DAA	09	21	76	Well	164	259	346	13.6	.11	.13	10.3	383		49	1809
115	17N	24E	17	CC	07	10	63	Well	810	210	2200	40				159		3000	3200
118	16N	26E	08	AD	03	16	46	Well	44	28	320*					230	24	59	580
120	16N	27E	28	88	03	05	46	Well			450*					450	12	59	480
123	16N	28E	28	CC	04		28	Well			350*					415		35	350
126	15N	29E	09	AC	01	07	26	Well			470*					810	53	28	240
127	15N	29E	11	DD	10	14	68	Well	620	210	2100*					380		2800	2600
128	15N	29E	14	AD	12	04	68	Well	2	1	500	2				598		24	300
180	17N	14E	06		04	09	76	Well	216	128	1800	3.8	.06	.01	9.6	1003		128	3767
181	17N	14E	06		09	21	76	Well	171.5	87	780	8.0	.12	.68	13.8	688		108	1672
182	17N	18E	19		08	17	73	Spring	114	39	3.6	1.4			<.1	127		4	319
183	19N	14E	33	88CD	04	09	76	Well	458	388	164	14	.12	.03	12.3	393		26	2699
184	20N	16E	24		09	22	76	Well	115	150	535	3.5	.04	<.01	11.1	539		1.7	1536
185	20N	16E	24	8D	09	22	76	Spring	426	450	1040	6.8	.06	.02	11.2	316		12.2	4532
186	17N	18E	01	ACC	04	03	67	Well	126	71	520*		1.96			500		43	1200
187	18N	16E	01	AD8	04	04	67	Well			437*					552		7	405
188	18N	16E	23	CBD	04	04	67	Well	171	171	403*		4.38			772		18	1285

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
21	.197	.4	7.89	8	5199	4553	1630	454	9.1	MBMG	120		yes	76M1811
22	.052	2.8	7.81	12	4889	2840	26	446	94.5	MBMG	360	211JORV	yes	76M1254
23	.113	1.8	8.36	17	3483	2409	20	1020	87.4	MBMG			yes	76M1255
24	19.99	.2	7.62	14	2565	1892	1090	370	2.8	MBMG			yes	76M1253
25	15.814	3.4	7.71	10.5	2582	1864	1180	505	2.5	MBMG	20		yes	76M1250
26	26.206	.8	7.56	12	7652	7723	4230	366	5.9	MBMG	23		yes	76M1249
27	.029	.5	8.96	13	2348	1541	8	416	83.7	MBMG	300		yes	76M1252
28	.452	.8	7.51	17	1463	1045	645	320	1.6	MBMG	90		yes	76M1251
29	.260	1.9	7.97	13	6547	4894	219	881	48.0	MBMG		211JORV	yes	76M1256
33	4.744	.5	8.04	10	1780	1434	918	197	1.5	USGS	120	211EGLE	no	72M0001
36	9.714	.2	7.52	15	4104	3618	2260	415	2.8	MBMG	27		yes	76M1246
38	15.25	.5	8.91	9	3038	2584	1710	334	1.8	MBMG	33		yes	76M1245
39	.746	.7	7.48	11	575	331	284	274	0.4	MBMG	35		yes	76M1244
81		.6		10			173	230		USGS	614	217KOTN	no	64M0019
82		9		8.3			275	331		USGS	1100	217KOTN	no	64M0009
83		1.4		16.6			36	265		USGS	1240	217KOTN	no	64M0006
64		1.4						715		USGS	311	211CLRO	no	64M0011
85		1.5					36	260		USGS	1100	217KOTN	no	64M0016
86		1.3		11.1			194	255		USGS	290	217KOTN	no	64M0018
87		2.4		9.4			10	315		USGS	850	217KOTN	no	64M0024
89		.8		8.3			337	195		USGS	42	211CLRO	no	64M0015
91		1.2		14.4			133	240		USGS	1596	217KOTN	no	64M0022
92		1.2		16.1			10	275		USGS	1470	217KOTN	no	64M0023
94	.054	.6	7.22	15	3475	2839	1470	314	3.9	MBMG	28	211CLRO	yes	76M1240
115			7.3			9538	2290	130	17.8	Unknown		337MSNC	no	63M0009
118							225	229		Unknown		320TSLP	no	46M0016
120								389		Unknown		217KOTN	no	46M0014
123								340		Unknown		217KOTN	no	28M0001
126								753		Unknown		217KOTN	no	26M0001
127			6.9				2410	312		Unknown		337MSNC	no	68M0006
128			8.2			1124	9	490	72.1	Unknown		217LKOT	no	68M0003
180	1.509	2.0	7.96	5	7978	6550	1070	823	24.0	MBMG	50		yes	76M0236
181	4.179	5.2	7.40	15	4046	3187	788	564	12.1	MBMG	63		yes	76M1243
182	.407	1.4	7.92	20	1754	545	442	104	.1	MBMG		331MOSN	no	73M0846
183	1.649	.2	7.74	12	4106	3957	2740	323	1.4	MBMG	33		yes	76M0237
184	6.213	.8	7.55	12	3518	2625	905	442	7.7	MBMG	40		yes	76M1238
185	34.564	6	7.70	16	7670	6669	2920	259	8.4	MBMG			yes	76M1237
186		1.0		8.3			607	410		USGS	695	211EGLE	no	64M0014
187								453		USGS	174	211EGLE	no	64M0013
188							1130	633		USGS	300	211EGLE	no	64M0007

LEWISTOWN

Chemical Analyses

Map rel. no.	T	R	Sec	Tract	Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
189	18N	17E	21	ABC	04	04	67	Well	43	14	217*		.64			409		6	279
190	18N	16E	12	ACA	04	03	67	Well	16	5	380*		.29			226		22	625
191	18N	19E	08	BCD	04	03	67	Well	24	14	193*		.08			366		12	208
192	18N	20E	34	BC	04	10	72	Well	7.1	1.6	219	5.4	4.09	.04	103.0	487	14	18.8	60
193	18N	20E	34	BC	04	29	72	Well	706	161	89	15.5	.22	.41	17.4	146		13.2	2405
194	19N	16E	11	BBB	11	16	71	Well	386	422	679	10.2	.05	.01	16.0	276		219	3505

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet (Con't.)

of Selected Waters (Con't.)

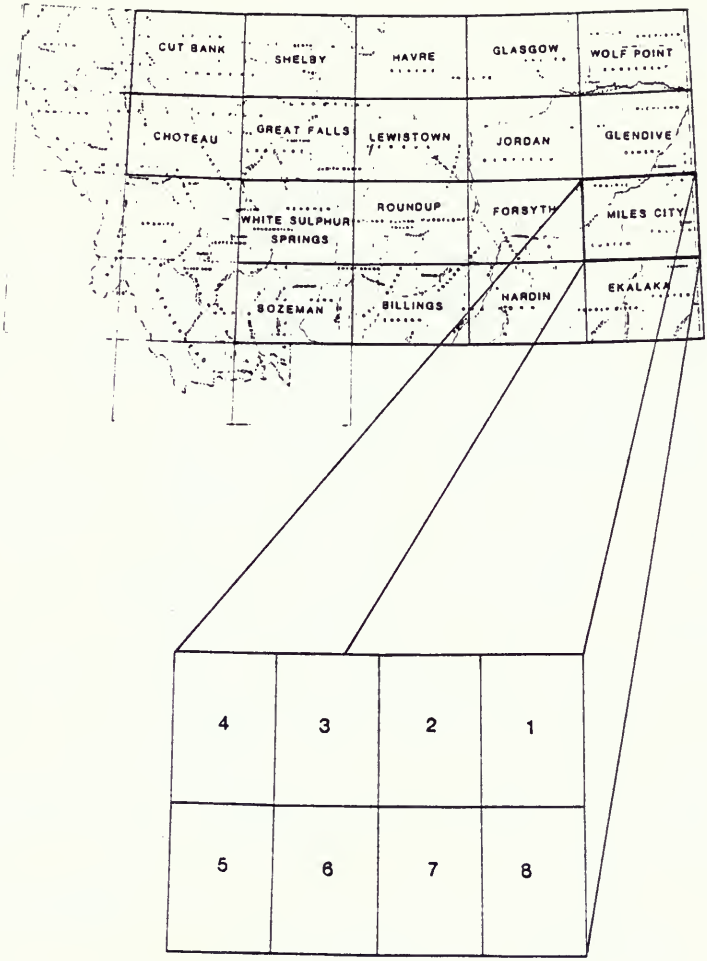
Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
189		1.0					163	335		USGS		211EGLE	no	64M0008
190		.7					61	185		USGS	376	211EGLE	no	64M0010
191		.6		12.8			117	300		USGS	551	211EGLE	no	64M0017
192	.294	6.1	8.52	28.6	1017	679	24	446	19.4	USGS		217SCCR	no	72M0066
193		4.8	7.47		3420	3484	2410	120	.8	USGS		331MDSN	no	72M0067
194	11.973	4	7.94	10.5	5680	5386	2720	226	5.7	USGS		211EGLE	no	72M0002

LEWISTOWN 1° x 2° Sheet

Trace Elements Analyses Sheet

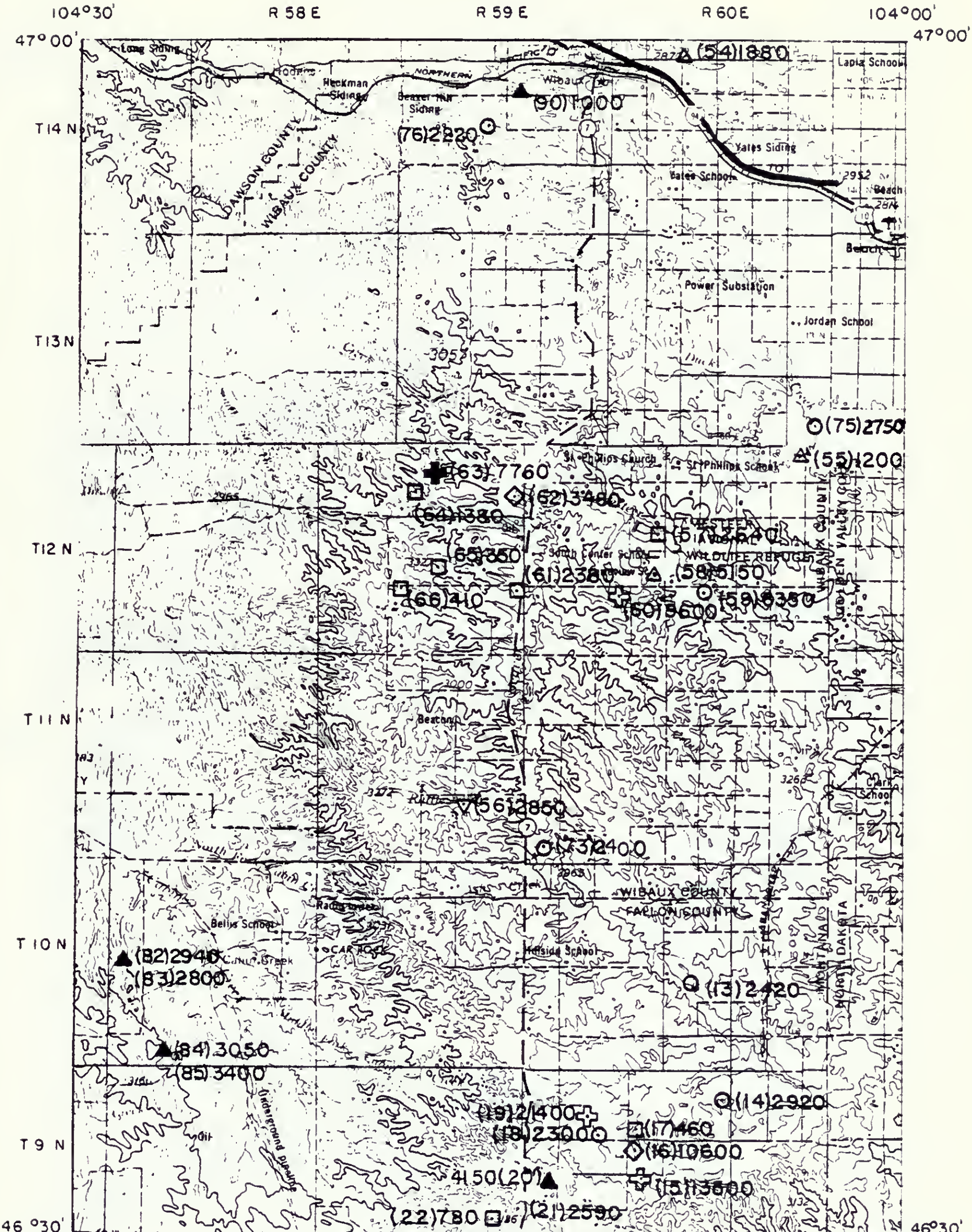
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Beryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
21	21N 14E 07 BCDC	<.05	<.2	<2 0		.73		<.01	.01	.07	.58	<.3	<.04	.176	<2 0		8.30	1 61	21	76M1811
22	22N 20E 02	<.05	<.2	2 3		2 9		<.01	<.01	<.05	.20	<.3	.01	.095	<2.0		.47	.07	<.01	76M1254
23	22N 20E 22 B	<.05	<.2	<2.0		4.0		<.01	<.01	<.05	.19.	<.3	.02	.176	<2 0		.38	.05	.01	76M1255
24	22N 17E 35 DC	.06	<.2	<2.0		.40		<.01	.02	.05	21	< 3	.03	.055	29.4		2 15	.18	22	76M1253
25	21N 16E 26 CA	.09	.2	<2.0		66		<.01	.02	.06	.16	<.3	.03	.036	21.3		2.36	55	05	76M1250
26	20N 15E 10 AC	.14	.48	<2.0		.66		.02	.04	.22	.21	<.3	.10	.188	65.8		7.8	1.06	.02	76M1249
27	21N 17E 30 CA	.06	<.2	<2.0		.49		<.01	<.01	<.05	.09	<.3	<.01	.095	<2.0		.15	.07	<.01	76M1252
28	21N 17E 30 DBA	.06	.2	<2 0		.22		<.01	.01	<.05	.11	<.3	.03	.088	<2 0		2.18	.19	.02	76M1251
29	21N 19E 13	.07	<.2	<2 0		2 9		<.01	.01	<.05	.76	<.3	.04	.042	<2 0		2.72	.06	<.01	76M1256
36	19N 14E 28 CCCB	<.05	<.2	<2.0		.83		<.01	02	.17	.55	<.3	05	.078	58.8		11.8	.58	.06	76M1246
38	19N 14E 33 BBB	.08	<.2	<2.0		.33		< 01	.02	.14	.64	<.3	.05	.055	194		3.05	.42	.04	76M1245
39	18N 14E 33 BCBD	.16	<.2	<2.0		.18		< 01	.01	<.05	.03	<.3	.02	.186	6.3		.64	.13	.02	76M1244
94	16N 14E 07 BDAA	.09	<.2	<2.0		.93		<.01	.01	.10	.16	<.3	.05	.170	16.2		1.16	.64	.12	76M1240
180	17N 14E 06	<.05	.29	<2 0	<5.	2.8	.01	<.01	.03	06	.14	<.3	.10	.160	7.3		1.06	.24	.06	76M0236
181	17N 14E 06	.06	<.2	<2.0		2.8		<.01	.03	.11	.15	<.3	.06	1.043	5.7		1 12	.34	.02	76M1243
183	19N 14E 33 BBCD	.14	.34	<2 0	<5.	6	.013	.02	.02	< 10.	.34	<.3	.07	.013	34		7.4	.45	07	76M0237
184	20N 16E 24	<.05	<.2	<2.0	<5.	1.0	.01	<.01	.01	<.05	.28	<.3	.03	.049	7.1	<.01	2.97	.25	.03	76M1238
185	20N 16E 24 BD	.05	.28	<2.0	<5.	.8	.02	.02	.02	.18	.44	<.3	.07	.049	95	.01	8.7	.71	1.99	76M1237

LOCATION BASE MAP



MILES CITY 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY



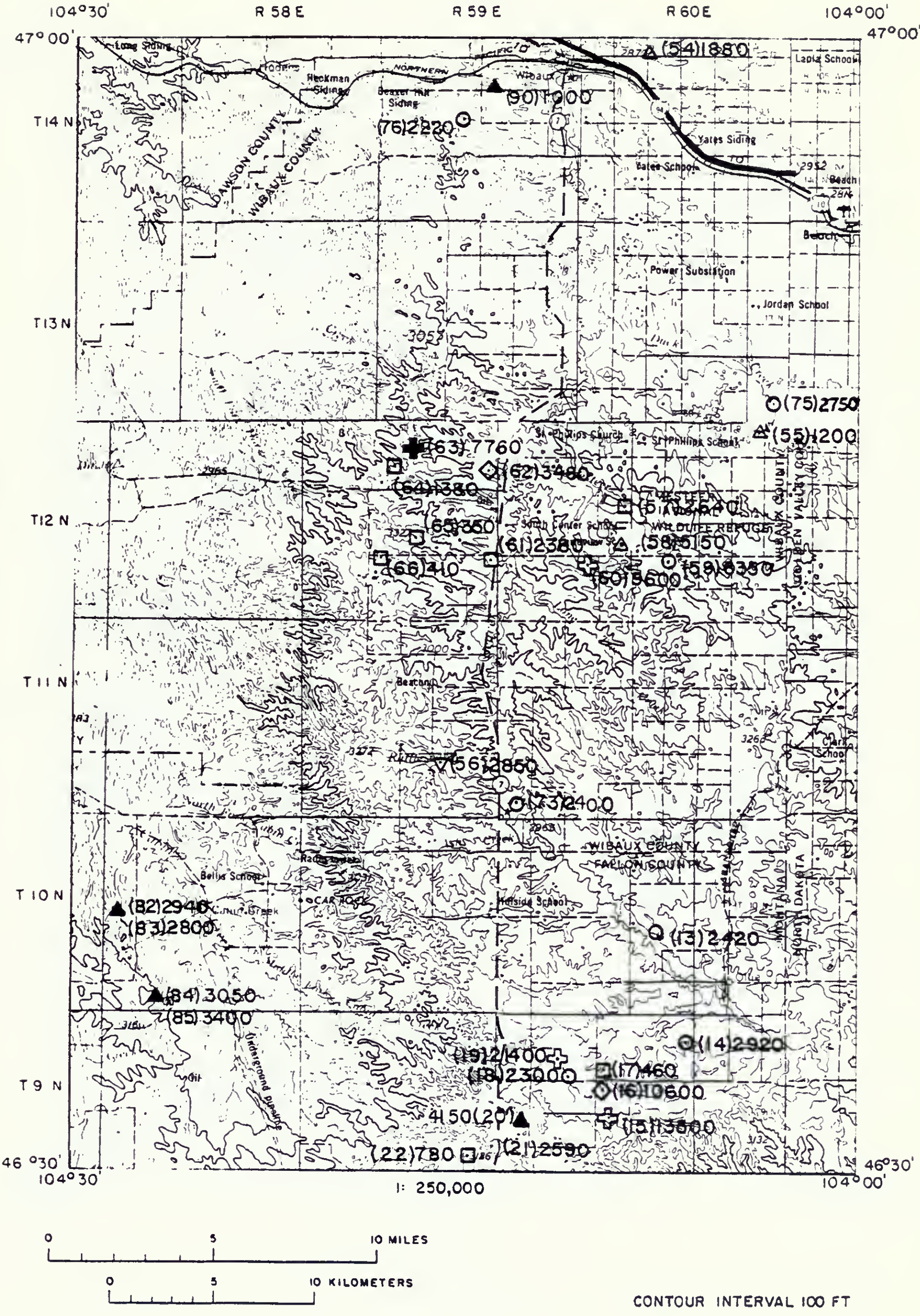
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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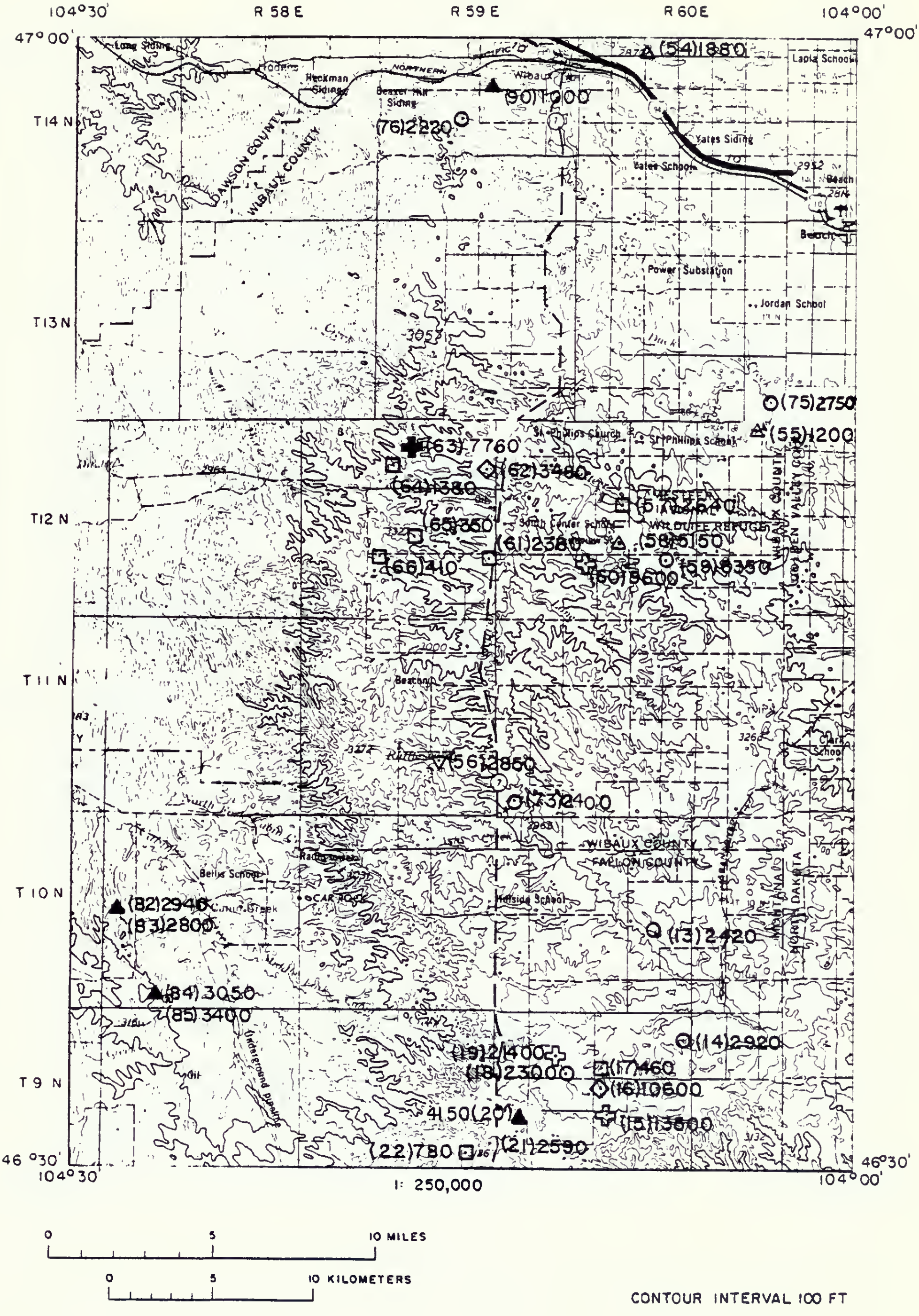
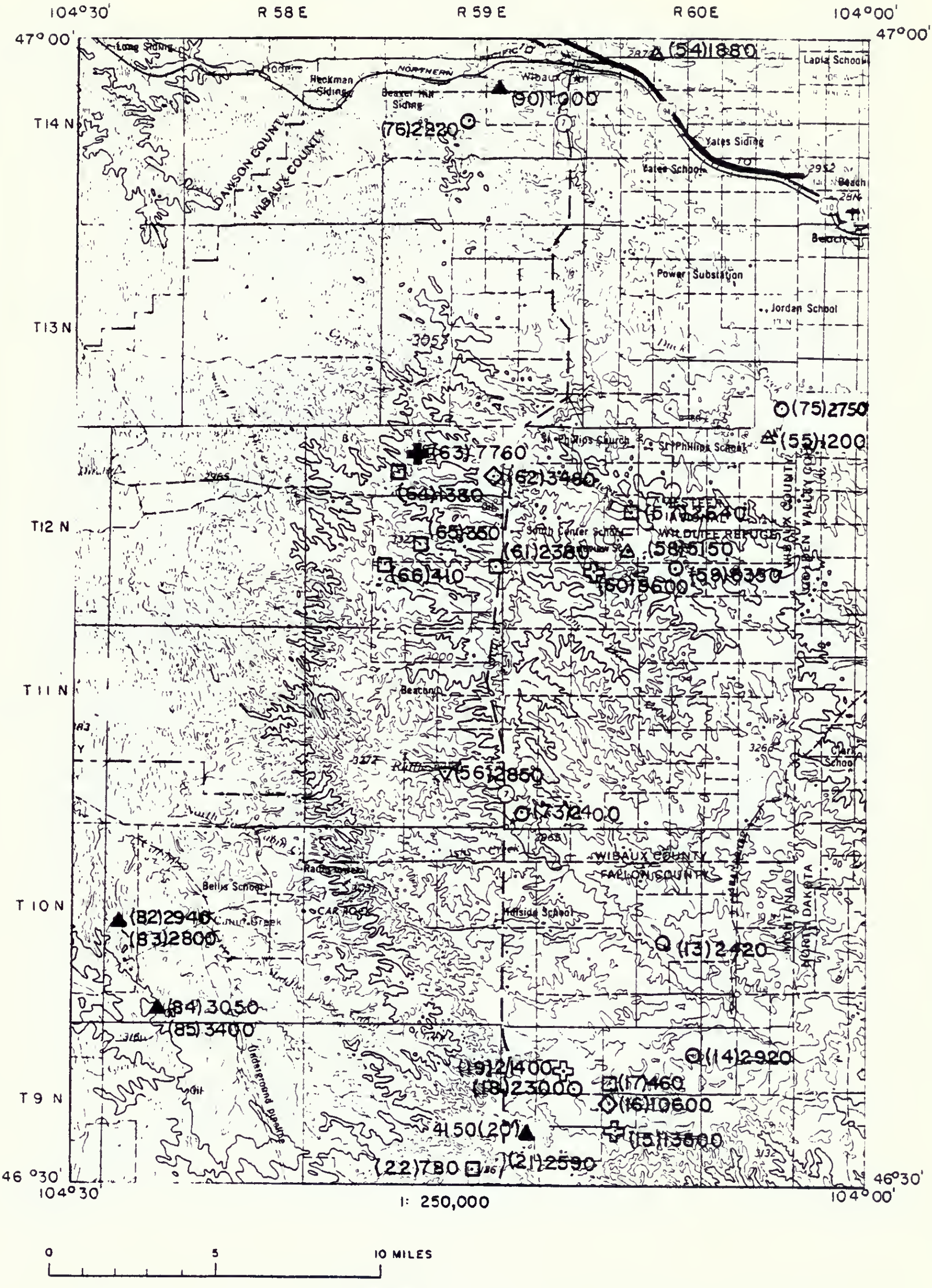


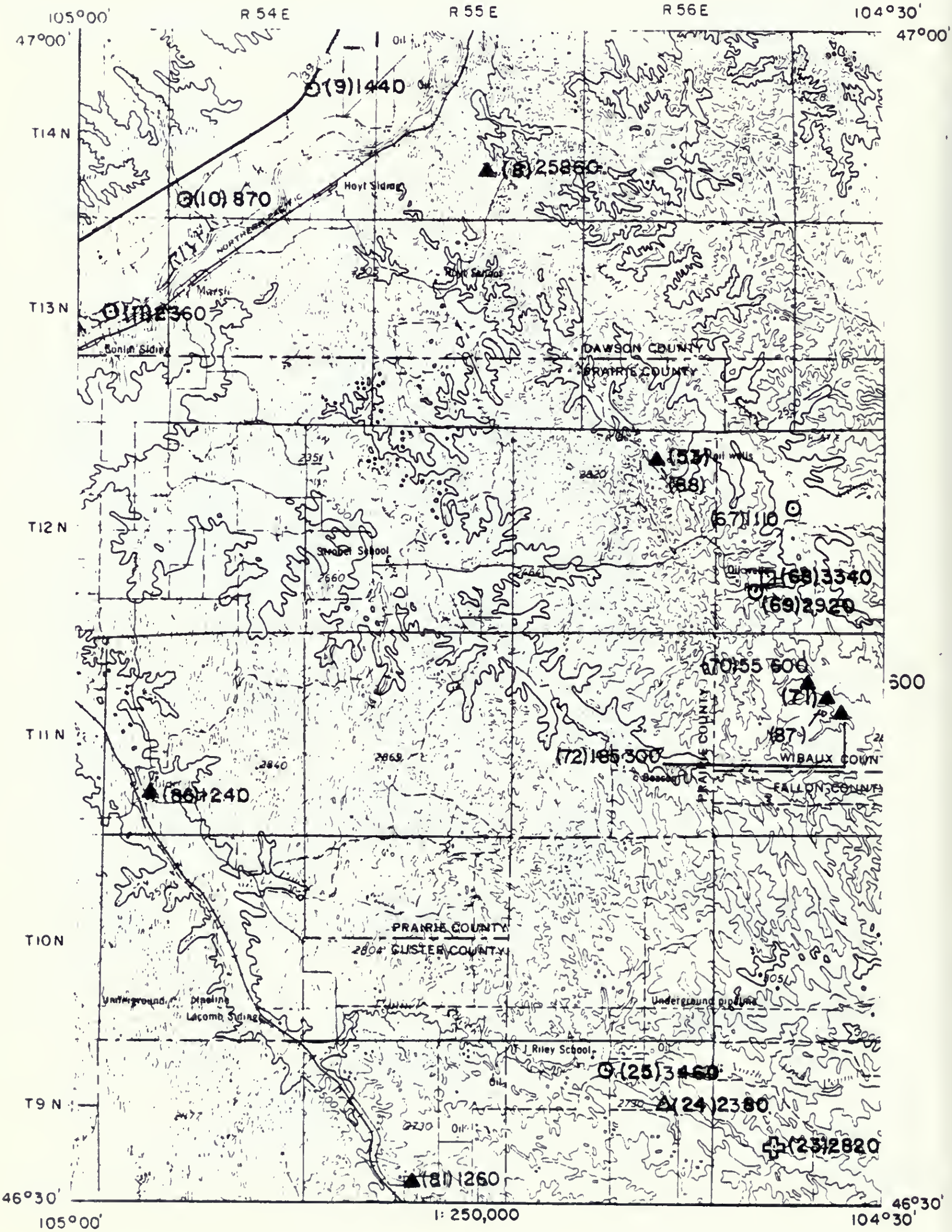
SPECIFIC CONDUCTANCE SURVEY

MILES CITY 1



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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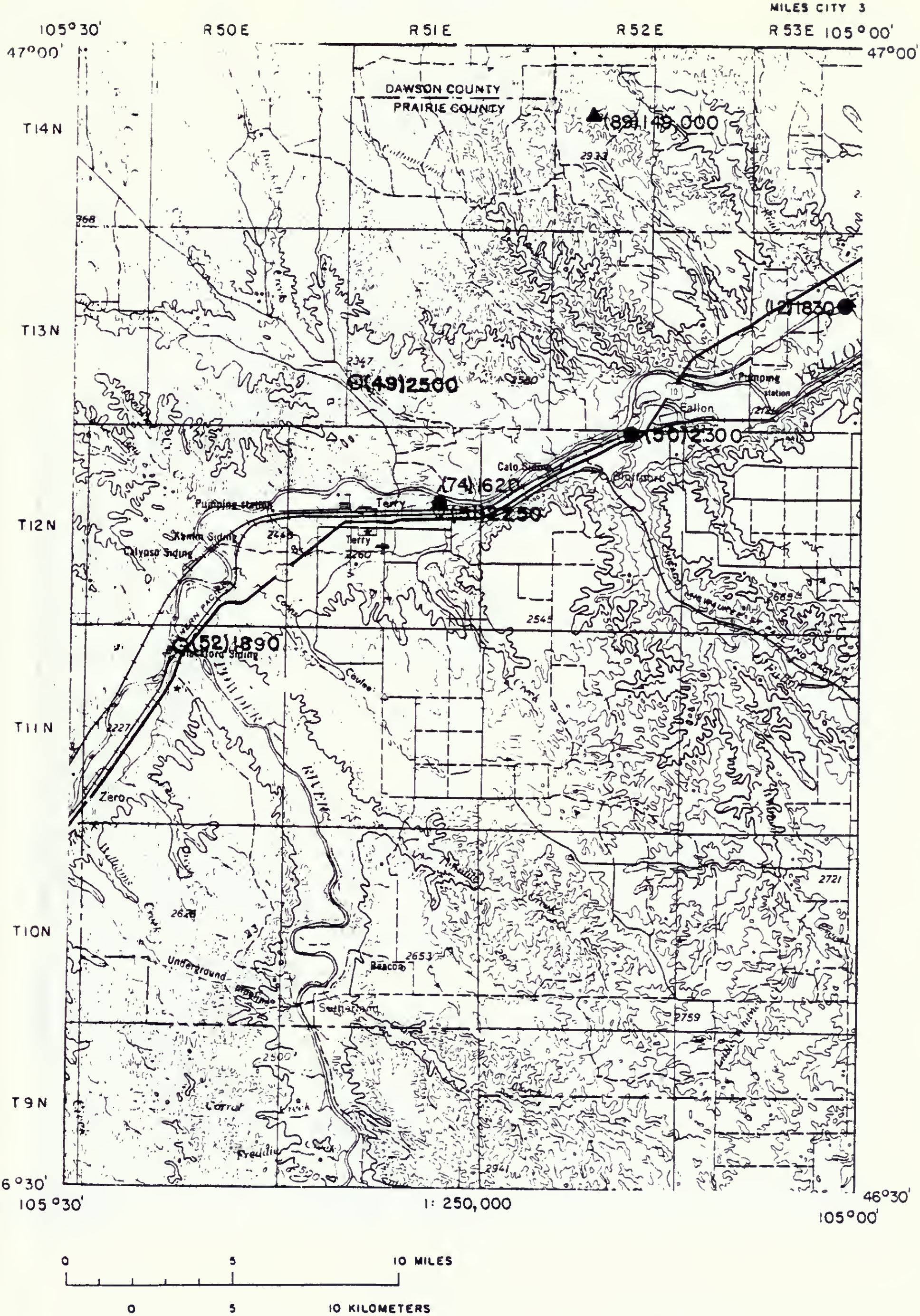
0 5 10 MILES

0 5 10 KILOMETERS

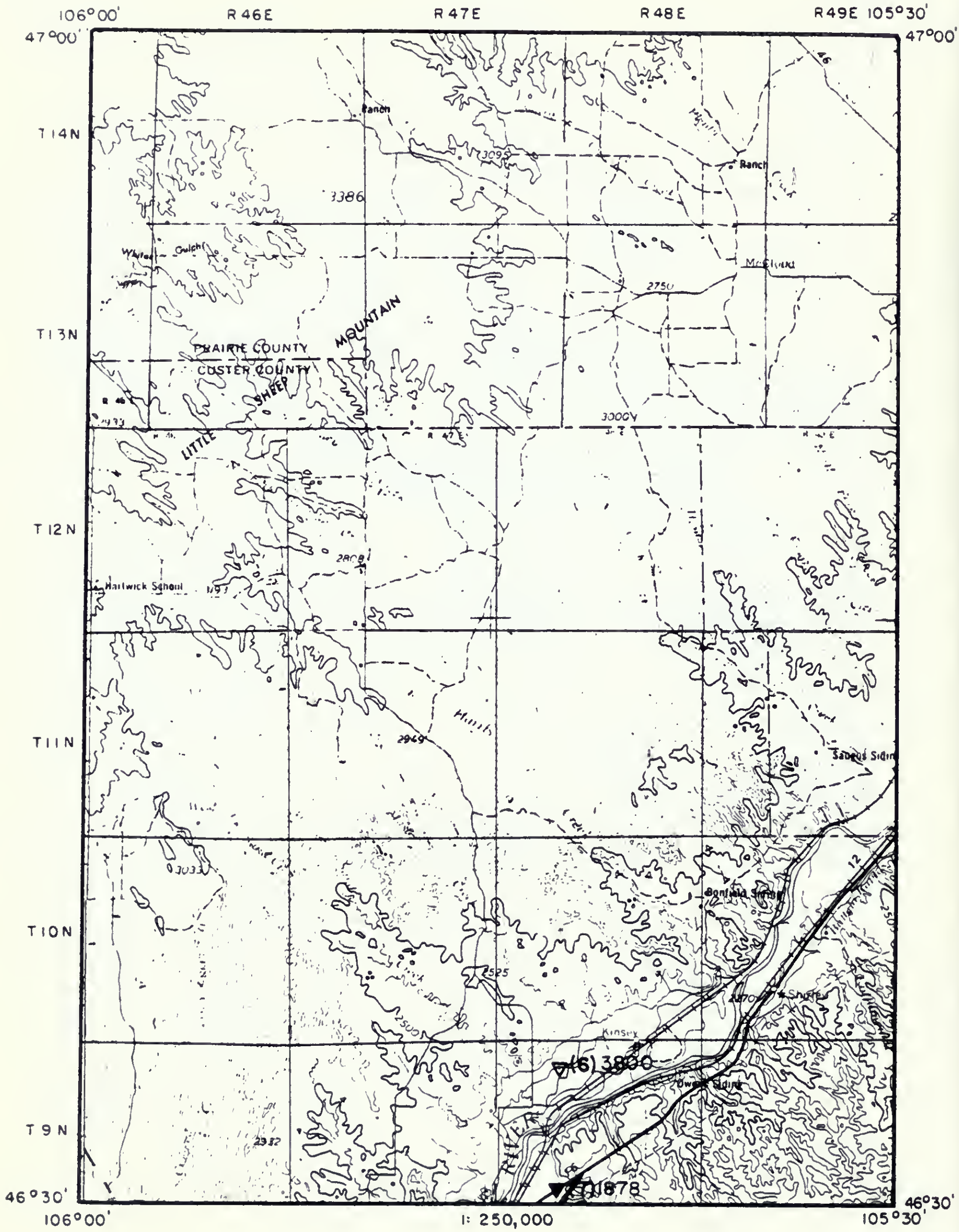
CONTOUR INTERVAL 100 FT

SPECIFIC CONOUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY

MILES CITY 4



1: 250,000

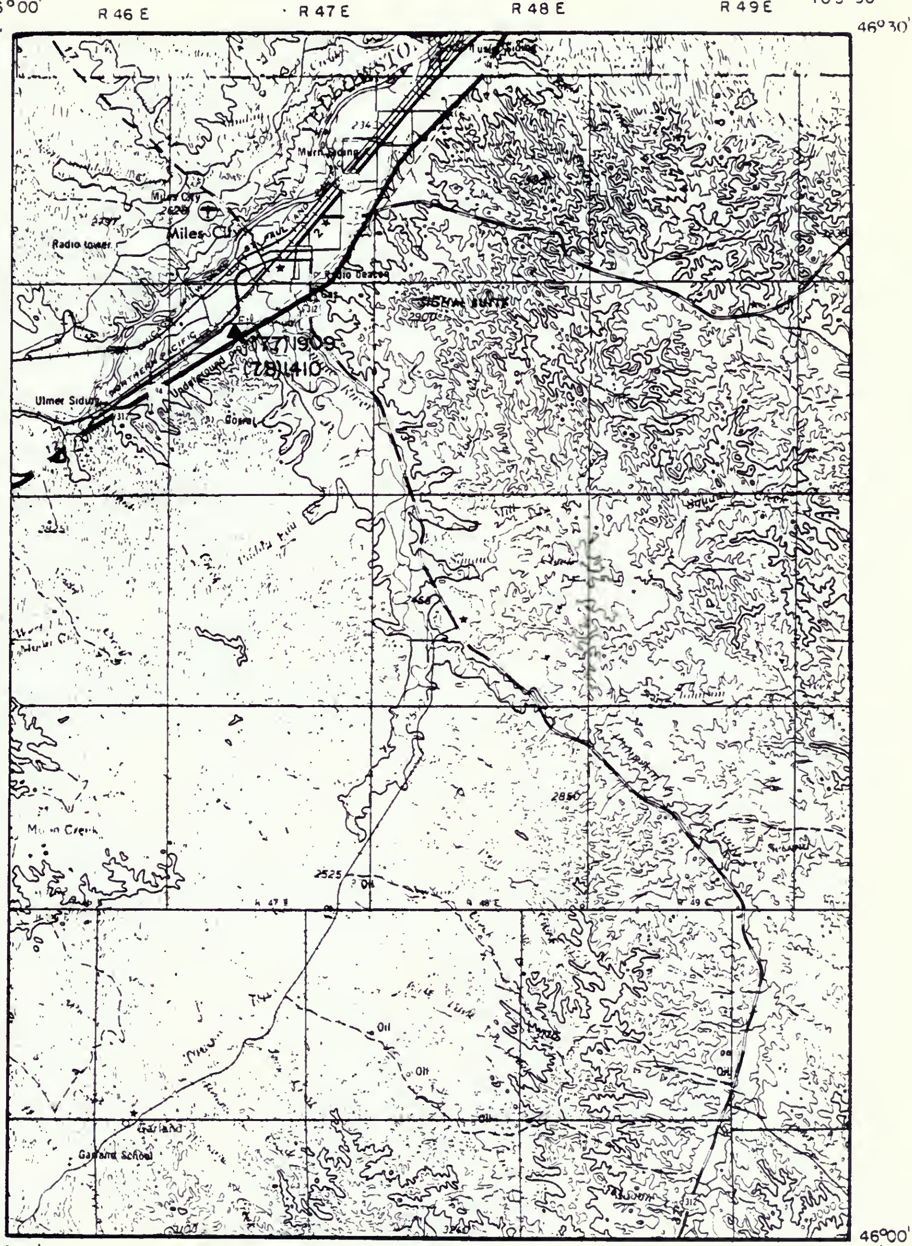
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

MILES CITY 5



1: 250,000

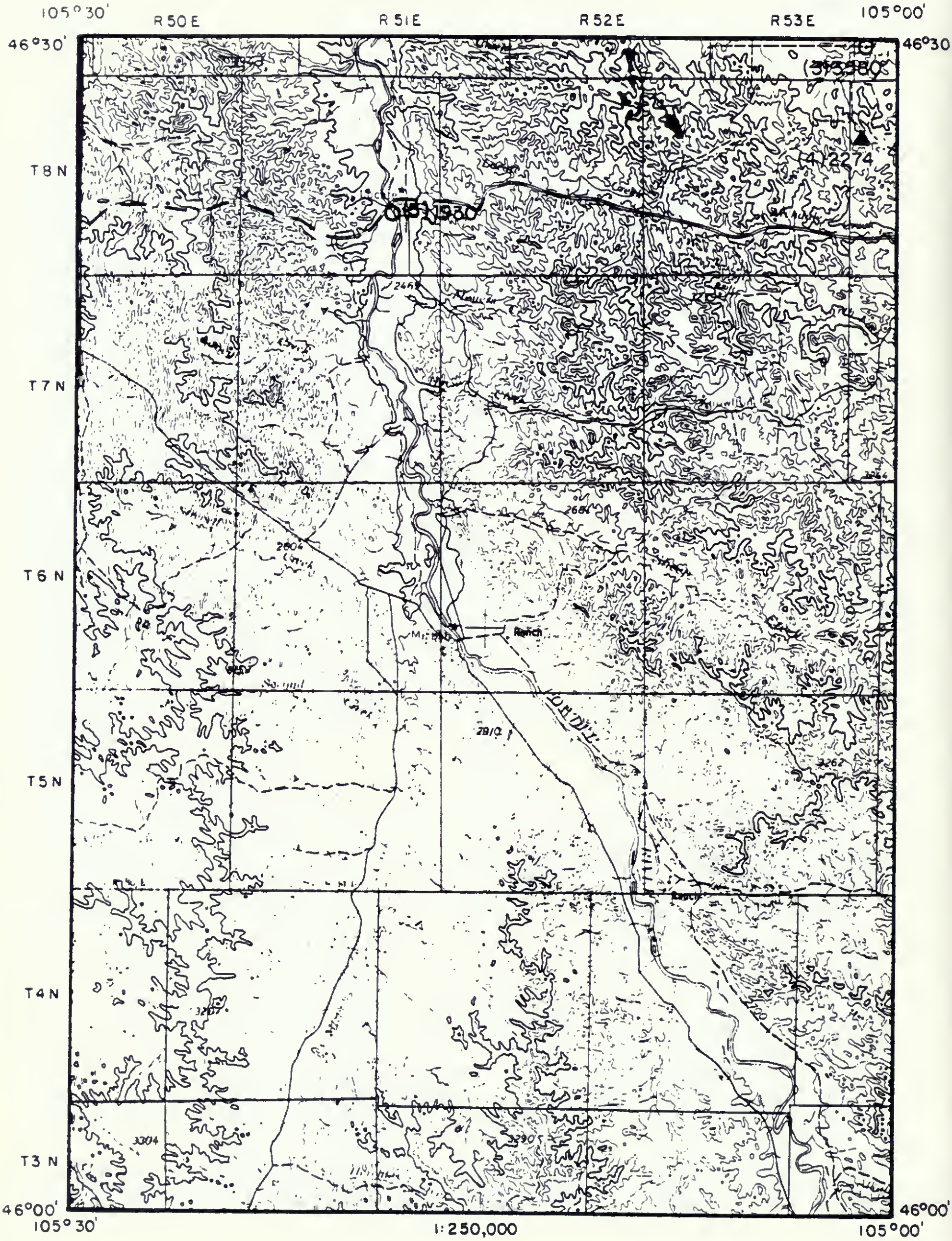
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

MILES CITY 6

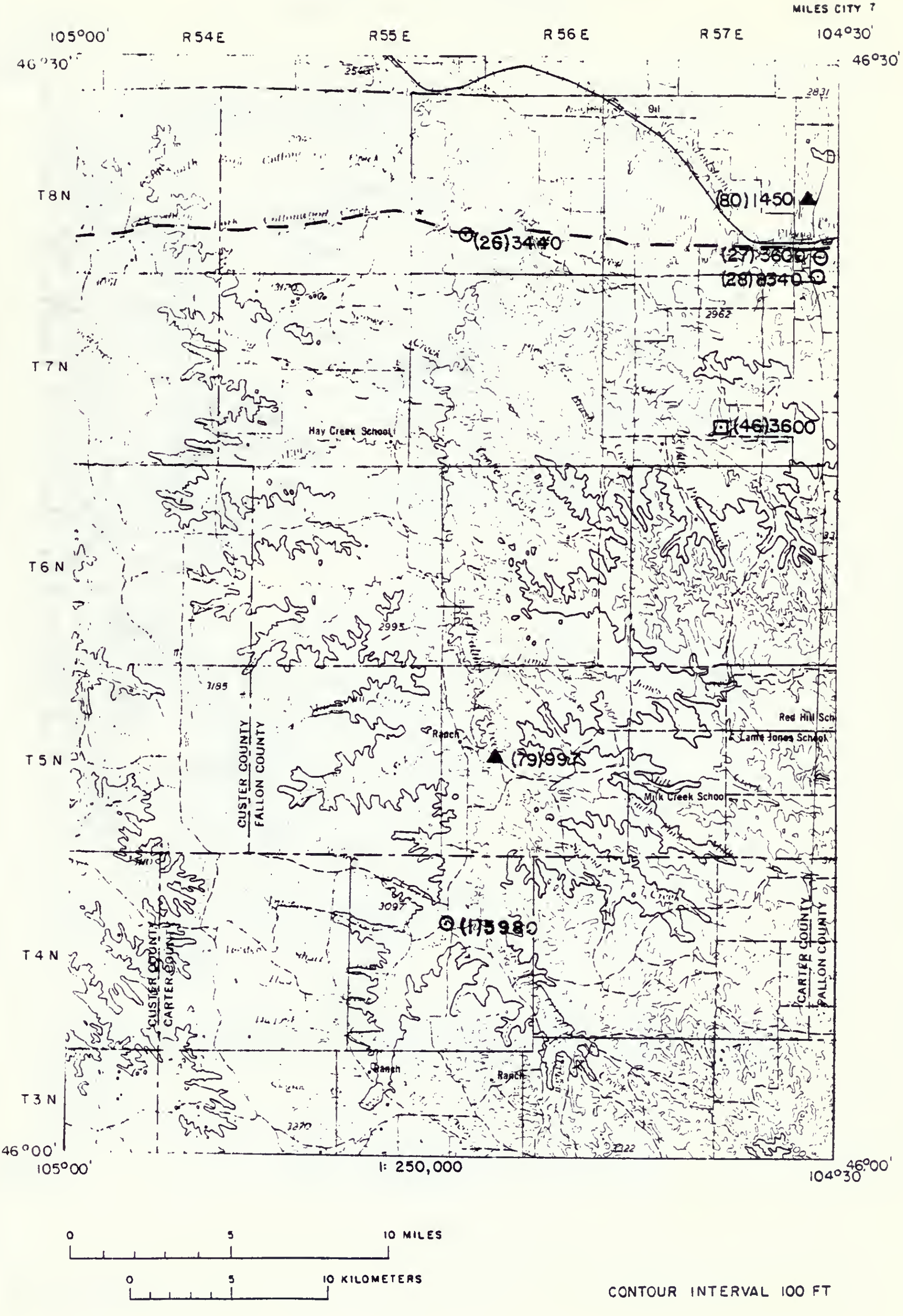


0 5 10 MILES

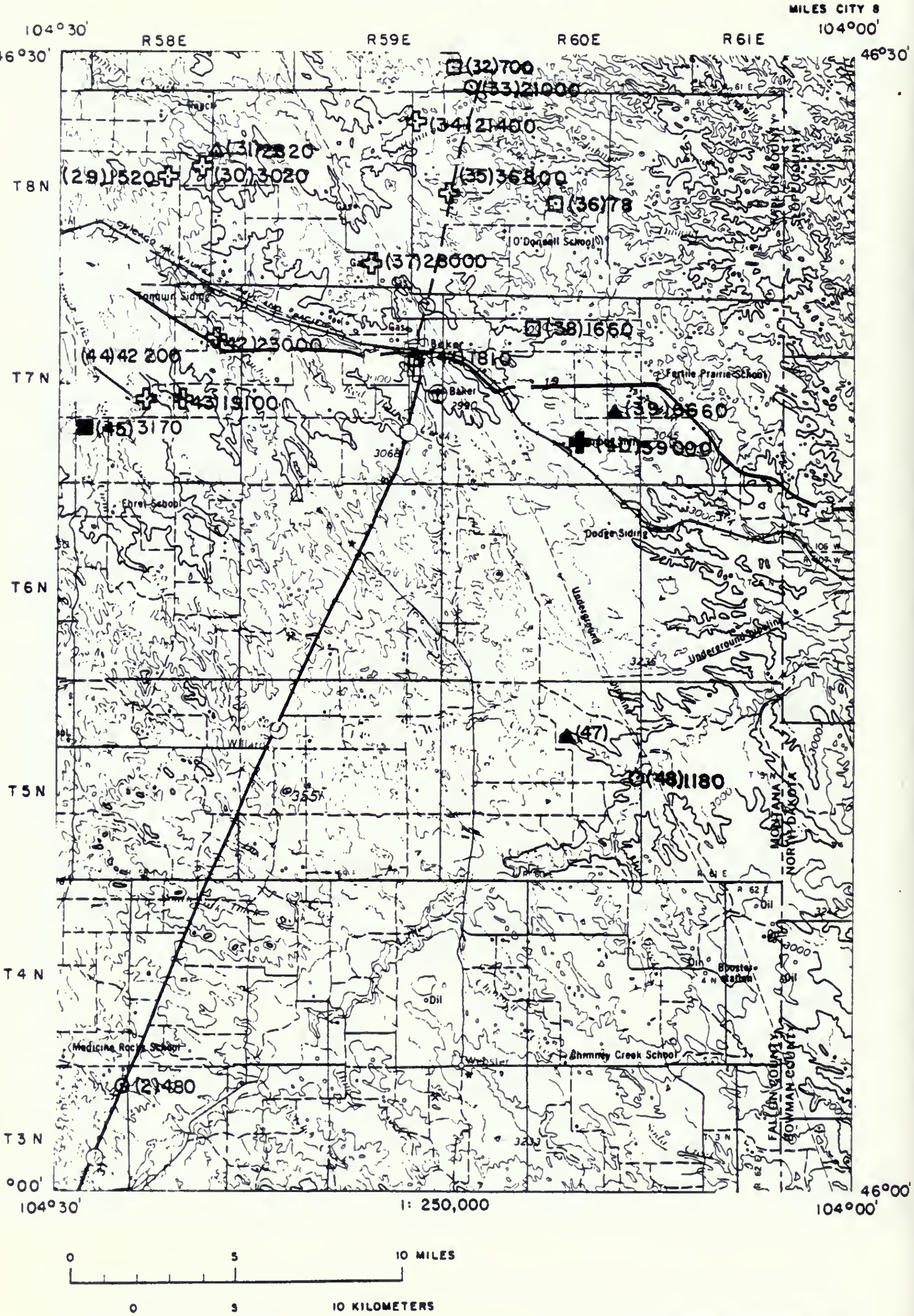
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

MILES CITY 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB7	Carter	04N 56E 15 BBB	10 15 76	Creek	1 cfs (E)	O'Fallon Creek	5980		no					
2	WQB4	Carter	03N 58E 01 DAC	10 15 76	Creek	no flow	0.1 mile N of Medicine Rocks at highway	480		no					
3	WQB4	Custer	09N 53E 35 BAB	11 17 76	Creek	0.1 cfs (E)	Whitney Creek	3580		no					
4	WQB5	Custer	08N 54E 07 CAC	11 17 76	Well		Pumped by windmill	2274		yes					
5	WQB3	Custer	08N 51E 26 ABB	11 17 76	River	290 cfs (E)	Powder River	1930		no					
6	WQB6	Custer	09N 48E 05 DAD	11 18 76	Canal	0.1 cfs (E)	Irrigation canal	3800		no					
7	WQB2	Custer	09N 48E 29 ACC	11 17 76	Canal	5 cfs (E)	Irrigation canal at highway	1878		yes					
8	69M0009	Dawson	14N 55E 27 CD	10 20 69	Well		4 miles W of Upper Magpie Reservoir	25860		yes				337MSNC	
9	WQB17	Dawson	14N 54E 14	09 07 75	Creek	3 cfs (E)	Clear Creek	1440		no					
10	WQB16	Dawson	14N 54E 31	09 07 75	Creek	2 cfs (E)	Cracker Box Creek	870		no					
11	WQB15	Dawson	13N 53E 14 C	09 07 75	Canal	2 cfs (E)	Bad Route Irrigation return, lined with salts	2360		yes					
12	WQB18	Dawson	13N 53E 16 A	09 07 75	Creek	5 cfs (E)	Bad Route Creek, lined with alkali	1830		no					
13	WQB19	Fallon	10N 60E 23 AD	10 11 75	Creek	3 cfs (E)	Beaver Creek NW of Ollie	2420		no					
14	WQB18	Fallon	09N 60E 01 DC	10 11 75	Creek	2 cfs (E)	Fork of Beaver Creek	2920		no					
15	WQB13	Fallon	09N 60E 22 BA	10 11 75	Seep		In Coulee	13500		no					
16	WQB14	Fallon	09N 60E 15 BC	10 11 75	Spring		Stock tank	10600		no					
17	WQB15	Fallon	09N 60E 10 CC	10 11 75	Reservoir		Salts below dam	460		no					
18	WQB16	Fallon	08N 60E 09 CC	10 11 75	Creek	> 1 cfs	Fork of Beaver Creek	2300		no					
19	WQB17	Fallon	09N 60E 08 AD	10 11 75	Seep		In coulee	21400		no					
20	WQB12	Fallon	09N 60E 19 AA	10 11 75	Well			4150		yes			56		Bowdell, Ben
21	WQB10	Fallon	09N 59E 25 AA	10 11 75	Reservoir		Shallow and muddy	2590		no					
22	WQB9	Fallon	09N 58E 25 BC	10 11 75	Reservoir		10 acre reservoir	780		no					
23	WQB11	Fallon	09N 57E 20 AA	10 11 75	Seep		Boggy and full of cattails, area once farmed	2820		no					
24	WQB22	Fallon	09N 56E 11 DC	10 12 75	Well		0.5 mile N of 5 acre seep	2380		no					
25	WQB21	Fallon	09N 56E 04 DD	10 12 75	Creek	> 1 cfs (E)	Pennel Creek	3460		no					
26	WQB35	Fallon	08N 56E 29 DB	10 14 75	Creek	1 cfs (E)	O'Fallon Creek	3440		no					
27	WQB27	Fallon	08N 58E 31 A	10 13 75	Creek	0.6 cfs (E)	Sandstone Creek	3600		no					
28	WQB28	Fallon	08N 58E 31 DB	10 13 75	Creek	50 gpm (E)	South Fork, Sandstone Creek	8340		no					
29	WQB26	Fallon	08N 58E 14 DB	10 13 75	Seep	10 gpm (E)	17 acres	1520		no					
30	WQB25	Fallon	08N 58E 13 A	10 13 75	Seep		Low, boggy area	3020		no					

MILES CITY 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	WQB24	Fallon	08N 59E 07 CCC	10 13 75	Well		Stock use	2820		no					
32	WQB20	Fallon	09N 59E 35 AD	10 11 75	Reservoir		On Pannel Creek	700		no					
33	WQB8	Fallon	09N 59E 36 CD	10 11 75	Creek	25 gpm (E)	Source of Pennel Creek, surrounded by rangeland	21000		no					
34	WQB7	Fallon	08N 60E 06 CC	10 11 75	Seep		19 acres in size, area is severely eroded	21400		no					
35	WQB6	Fallon	08N 60E 20 BBB	10 11 75	Seep		Drains to the E	36800		no					
36	WQB5	Fallon	08N 60E 23 BD	10 11 75	Reservoir		Small reservoir, wheat fields 0.5 mile to the N	780		no					
37	WQB23	Fallon	08N 59E 35 A	10 13 75	Seep		NW of Baker, less than 1 acre in size	28000		no					
38	WQB4	Fallon	07N 60E 04 DC	10 11 75	Reservoir		Small reservoir W of an oil rig	1660		no					
39	WQB2	Fallon	07N 60E 24 CC	10 10 75	Well		Located in a seep area	6660		yes					
40	WQB1	Fallon	07N 60E 28 BDD	10 10 75	Seep		Low area, pond above	39000		yes					
41	WQB3	Fallon	07N 59E 13 BD	10 10 75	Reservoir		Baker Lake Reservoir	1810		no					
42	WQB29	Fallon	07N 58E 12 CA	10 13 75	Seep		Surrounded by cropland and rangeland	23000		no					
43	WQB33	Fallon	07N 58E 23 BC	10 13 75	Seep		Low area surrounded by rolling hills	18100		no					
44	WQB32	Fallon	07N 58E 22 BC	10 13 75	Seep		20 acres in size, steep hill side	42200		no					
45	WQB31	Fallon	07N 58E 29 AC	10 13 75	Reservoir		Large reservoir not fully constructed	3170		yes					
46	WQB30	Fallon	07N 57E 27 D	10 13 75	Reservoir		Low valley with farmland	3600		no					
47	42M0001	Fallon	05N 60E 10 DA	10 14 75	Well		15 miles SE of Baker			yes	3000			211JDRV	
48	WQB34	Fallon	05N 60E 13 DD	10 14 75	Creek	3 cfs (E)	Little Beaver Creek	1180		no					
49	WQB4	Prairie	13N 51E 30 CBD	10 17 75	Creek	no flow	Cedar Creek 5 miles N of Terry on highway	2500		no					
50	WQB3	Prairie	12N 52E 02 BAD	10 16 75	Creek	0.5 cfs (E)	O'Fallon Creek at bridge on I-94	2300		yes					
51	WQB2	Prairie	12N 51E 14 DBA	10 16 75	Canal	0.3 cfs (E)	Irrigation return via Ash Creek at I-94	2250		no					
52	WQB1	Prairie	11N 50E 04 DAA	10 18 75	River	40 cfs (E)	Powder River at bridge on I-94	1890		yes					
53	31M0001	Prairie	12N 58E 02 C	08 09 31	Well		18 miles E of Fallon			yes	2750			211FXHL	
54	WQB1	Wibaux	14N 60E 04 CC	09 03 75	Well		Located in a coulee S of cultivated area	1880		no					
55	WQB27	Wibaux	12N 61E 05 AA	09 04 75	Well			1200		no					
56	WQB28	Wibaux	11N 59E 26	09 04 75	Ditch		Diversion ditch for saline water	2850		no					
57	WQB28	Wibaux	12N 60E 15	09 04 75	Reservoir		Lame Steer Creek Wildlife Refuge	2640		no					
58	WQB23	Wibaux	12N 60E 22 DD	09 04 75	Well		Stock use	5150		no					Morris
59	WQB24	Wibaux	12N 60E 25 BB	09 04 75	Creek	26 gpm (E)	Lame Steer Creek, dryland farming area	6360		no					
60	WQB22	Wibaux	12N 60E 28 AB	09 04 75	Seep	5 gpm (E)	300 feet long by 20 feet wide	9600		no					

MILES CITY 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
61	WQB20	Wibaux	12N 59E 25 A	09 04 75	Pond		Located in low, boggy area	2380		no					
62	WQB30	Wibaux	12N 59E 12	09 04 75	Spring		Surrounded by rangeland	3480		no					
63	WQB18	Wibaux	12N 59E 03	09 04 75	Seep		200 feet long by 50 feet wide on a hillside	7760		yes					
64	WQB17	Wibaux	12N 59E 09	09 04 75	Reservoir		Located just below the seep	1380		no					
65	WQB19	Wibaux	12N 59E 22	09 04 75	Reservoir		Located in hilly terrain, dryland farming area	350		no					
66	WQB21	Wibaux	12N 59E 28 BA	09 04 75	Reservoir		New reservoir, salts cover the ground	410		no					
67	WQB14	Wibaux	12N 57E 16	09 04 75	Creek	no flow	Cedar Creek, rangeland area	1110		no					
68	WQB15	Wibaux	12N 57E 29 AC	09 04 75	Reservoir		Large reservoir below Pine Unit Oil Fields	3340		no					
69	WQB16	Wibaux	12N 57E 29	09 04 75	Coulee	5 gpm (E)	Small coulee lined with salts	2920		no					
70	56M0011	Wibaux	11N 57E 09 AC	04 13 56	Well		25 miles NW of Baker	55600		yes	2700			337MSNC	
71	27M0001	Wibaux	11N 57E 10 CC	08 18 27	Well		33 miles SW of Wibaux			yes	2883			211JDRV	
72	56M0004	Wibaux	11N 57E 15 AA	10 03 56	Well		30 miles SW of Wibaux	185300		yes	2940			230SPRF	
73	WQB25	Wibaux	12N 60E 31	09 04 75	Creek	2 cfs (E)	Beaver Creek	2400		no					
74	WQB23	Prairie	12N 51E 14 AC	11 11 78	Creek		Ash Creek near Terry	1820		yes					
75	WQB28	Wibaux	13N 60E 36	09 04 75	Creek	no flow	Duck Creek, seep area at its head	2750		no					
76	WQB13	Wibaux	14N 59E 18	09 03 75	Creek		Beaver Creek at Wibaux	2220		no					
77	76W0095	Custer	07N 47E 08 A	01 21 78	Well		National Fish Hatcheries well no. 1	1909		yes					
78	76W0096	Custer	07N 47E 08 A	01 21 76	Well		National Fish Hatcheries well no. 2	1410		yes					
79	63M0064	Custer	06N 56E 17 DD	08 04 63	Well	18.1 gpm (M)		997	13	yes		47	648	211FXHL	
80	63M0065	Fallon	08N 58E 30 BD	08 30 63	Well			1450	18	yes			1178	211FXHL	
81	63M0066	Fallon	09N 55E 27 BB	08 30 63	Well	3.5 gpm (M)		1260	15.6	yes		13	1100	211FXHL	
82	62M0018	Custer	10N 58E 18 CD	01 18 82	Well	53.5 gpm (M)		2940		yes		141	396	211FXHL	
83	72M0071	Fallon	10N 58E 18 CD	02 08 72	Well	50 gpm (M)	USGS observation well	2800	13	yes	2772	130	241	211FXHL	
84	58M0010	Fallon	10N 58E 32 DB	10 27 68	Well			3050		yes			463	211FXHL	
85	61M0006	Fallon	10N 58E 32 DB	04 28 61	Well	35 gpm (M)		3400		yes			487	211FXHL	
86	63M0067	Prairie	11N 54E 29 CA	08 30 63	Well			1240	12	yes			865	211FXHL	
87	27M0002	Wibaux	11N 57E 10 CC	08 18 27	Well					yes				211JDRV	
88	31M0015	Prairie	12N 56E 02 C	08 09 31	Well		10 miles E of Hoyt School			yes	2300			211FXHL	
89	69M0001	Dawson	14N 62E 17 BC	10 29 69	Well			149000		yes	2712			217 MDDY	
90	74M0301	Wibaux	14N 58E 10 CDA	03 11 74	Well	12 gpm (M)		1000		yes	2800			125FRUN	Job, J.

MILES CITY

Chemical Analyses

Map ref no.	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
4	08N 54E 07 CAC	11	17	76	Well	166	166	185	6.3				476		8.0	980
7	09N 48E 29 ACC	11	17	76	Canal	66	38.9	335	11				508		10	620
8	14N 56E 27 CD	10	20	69	Well	860	140	5100*					525		8800	940
11	13N 53E 14 C	09	07	75	Creek	106	130	272	9.8				565		11	880
20	09N 60E 19 AA	10	11	75	Well	460	321	246	13				78		19.2	2840
39	07N 60E 24 CC	10	10	75	Well	399	671	490	38				261		65	4400
40	07N 60E 26 BDD	10	10	75	Seep	410	202.0	9200	97				217		79	28600
45	07N 58E 29 AC	10	13	75	Reservoir	85	155	500	16				600	14	13.7	1380
47	05N 60E 10 DA	10	14	42	Well	79	22	3000*					205		4700	44
50	12N 52E 02 BAD	10	16	76	Creek	75	78	375	13				488		18	895
52	11N 50E 04 DAA	10	18	78	River	100	49	230	11				222	4	81	620
53	12N 56E 02 C	08	09	31	Well			340*					440		24	320
63	12N 59E 03	09	04	75	Seep	397	381	1320	11	.93	2.0					6600
70	11N 57E 09 AC	04	13	56	Well	1300	100	14000*					313		21000	3700
71	11N 57E 10 CC	08	18	27	Well	120	30	3200*					220		7000	
72	11N 57E 15 AA	10	03	56	Well	1800	260	80000*					76		120000	3000
74	12N 51E 14 AC	11	11	76	Creek	49.1	39.5	280	11				586		17	380
77	07N 47E 08 A	01	21	76	Well	2.8	4.3	426	1.5				874	34	21	160
78	07N 47E 08 A	01	21	76	Well	4.8		338	.89				705	40	19.2	80
79	05N 56E 17 DD	08	04	63	Well	.3	.6	247	.8	.08	.05	14	522		2.9	103
80	08N 58E 30 BD-	08	30	63	Well	1.7	.2	365	1.0	.01	.01	12	575	50	38	166
81	09N 55E 27 BB	08	30	63	Well	1.1	.2	318	.8	.06		12	654		14	126
82	10N 58E 16 CD	01	16	62	Well	9	4	765					1098		16	749
83	10N 58E 16 CD	02	08	72	Well	9.6	2.5	650	2.0	.01		17.4	1032		6.1	573
84	10N 58E 32 DB	10	27	58	Well	13	5	877					1049	60	14	942
85	10N 58E 32 DB	04	26	61	Well	6	3	840					793	108	40	934
86	11N 54E 29 CA	08	30	63	Well	1.8	.4	315				11	645	22	16	85
87	11N 57E 10 CC	08	18	27	Well	120	30	3200*					220		7000	
88	12N 56E 02 C	08	09	31	Well			770*					1000	109	180	410
89	14N 52E 17 BC	10	29	88	Well	12	12	3000*					2160		3400	18
90	14N 69E 10 CDA	03	11	74	Well	107	60	35.9	4.1			9.5	416		6.2	246

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

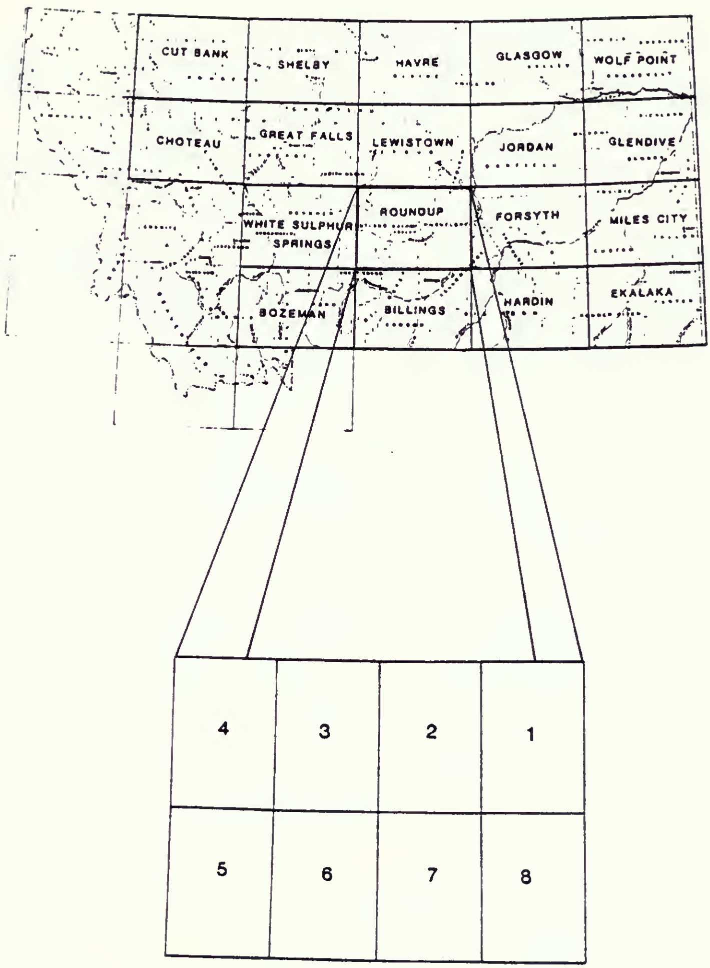
Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
4	.48		8.00		2274	1050	1100	390	2.4	WQB			no	76W2758
7	2.1		8.20		1878	881	325	415	8.1	WQB			no	76W2757
8			6.10				2720	431		Unknown		337MSNC	no	88M0009
11	8.6		7.94		2260	1972	798	455	4.2	WQB			no	75W1901
20	.93		5.81		4150	3980	2470	64	2.2	WQB			no	75W2110
39	.02		7.08		6660	6324	3760	214	3.5	WQB			no	75W2112
40	1.1		7.47		39000	40520	9340	178	41.4	WQB			no	75W2113
45	.02		8.51	7	3170	2744	852	515	7.5	WQB			no	75W2102
47							288	168		Unknown		211JDRV	no	42M0001
50	2.0		8.10		2200	984	510	400	7.2	WQB			no	76W2589
52	.52		8.40		1890	880	461	189	4.7	WQB			no	76W2588
53								361		Unknown		211FXHL	no	31M0001
63	2.6		4.44		7760	7819	2560		11.4	WQB			yes	75W1900
70			8.30				3660	257		Unknown		337MSNC	no	56M0011
71							423	180		Unknown		211JDRV	no	27M0001
72			6.50				5560	62		Unknown		230SPRF	no	56M0004
74			8.00		1620	207	285	480	7.2	WQB			no	76W2743
77			8.79		1909	1522	25	772	37.4	NFH			no	76W0095
78			8.94		1410	1188	12	644	42.1	NFH			no	76W0096
79	.2	.6	8.00	13	997	627	3	428	62	Unknown		211FXHL	no	63M0064
80	.2	.9	8.40	18	1450	917	5	555	71	Unknown		211FXHL	no	63M0065
81		1.4	8.20	15.5	1260	795	4	536	69	Unknown		211FXHL	no	63M0066
82			7.60		2940	2083	39	901	53	Unknown		211FXHL	no	62M0018
83	.723		8.02	13	2800	1770	34	847	48.4	Unknown		211FXHL	no	72M0071
84			8.70		3060	2428	53	960	52	Unknown		211FXHL	no	58M0010
85			8.30		3400	2324	33	831	65	Unknown		211FXHL	no	61M0006
86	.1	1.5	8.60	12	1240	771	6	566	58	Unknown		211FXHL	no	63M0067
87							423	180		Unknown		211JDRV	no	27M0002
88								1000		Unknown		211FXHL	no	31M0018
89			7.80				79	1770		Unknown		217MDDY	no	69M0001
90		0.3	7.47	5.5	1000	675	515	343	0.7	SCS		125FRUN	no	74M0301

MILES CITY 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (μg/l)	Beryl-lium (μg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (μg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (μg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
63	12N 59E 03						.02		.03	.05									.50	75W1900

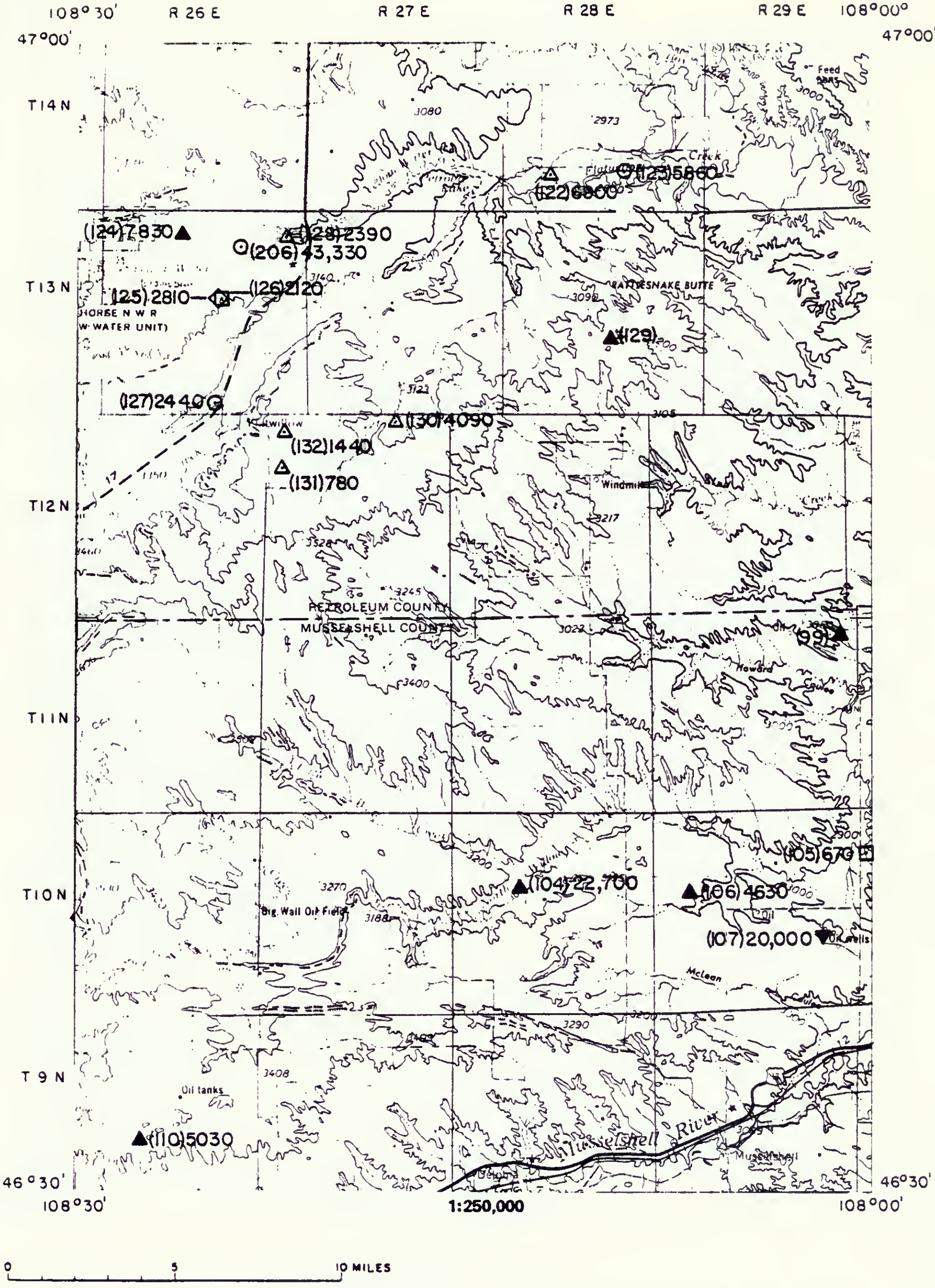
LOCATION BASE MAP



ROUNDUP 1° x 2° SHEET

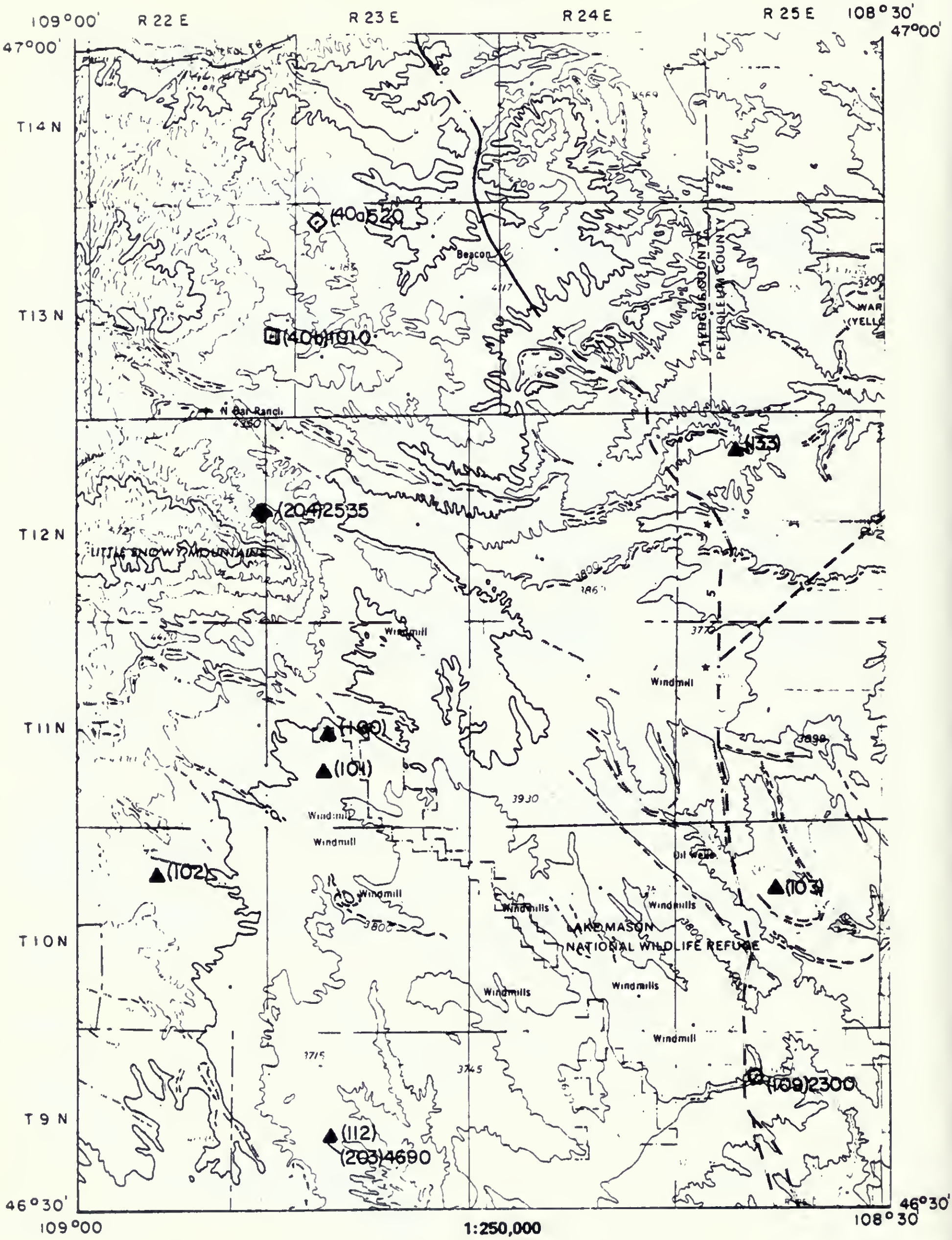
SPECIFIC CONDUCTANCE SURVEY

ROUNOUP I



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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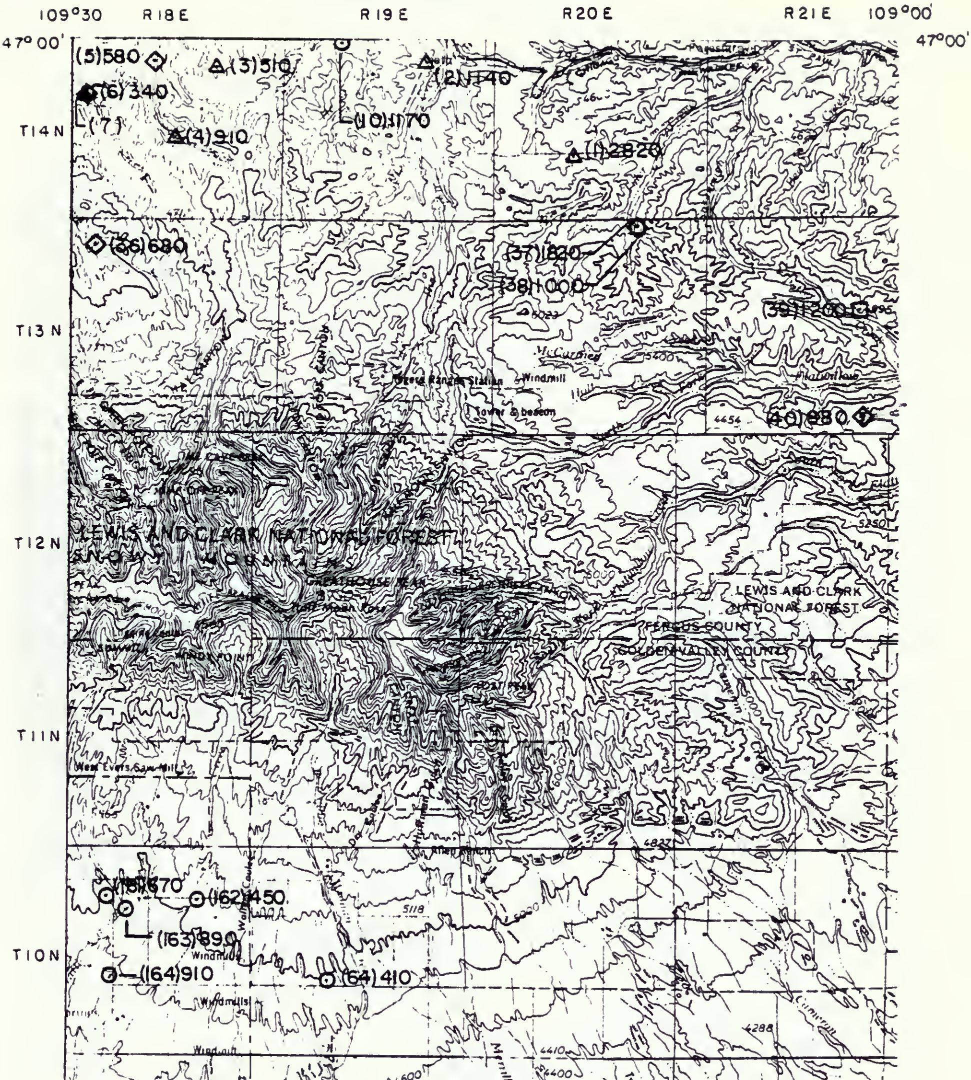
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONOUCTANCE SURVEY

ROUNOUP 3



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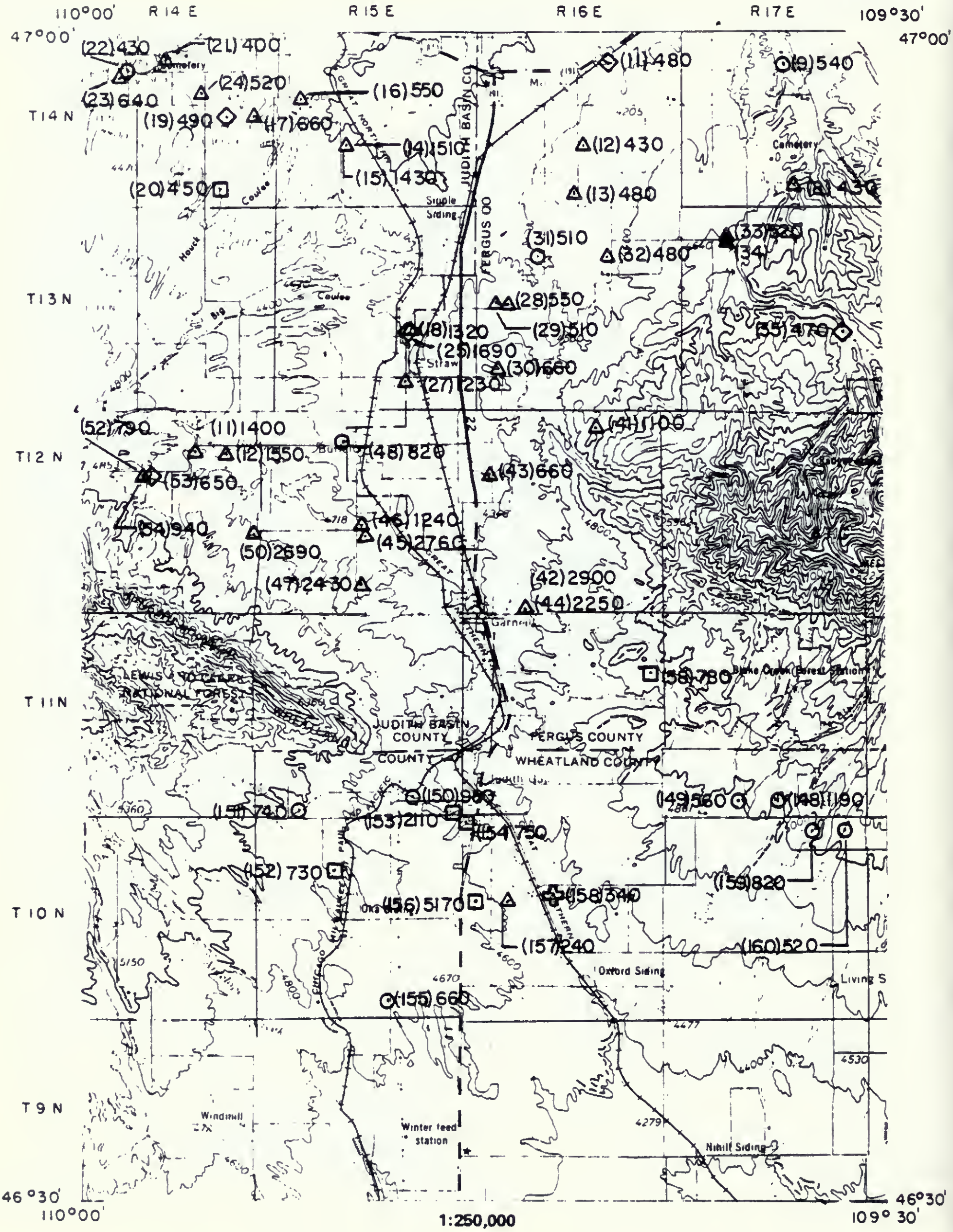

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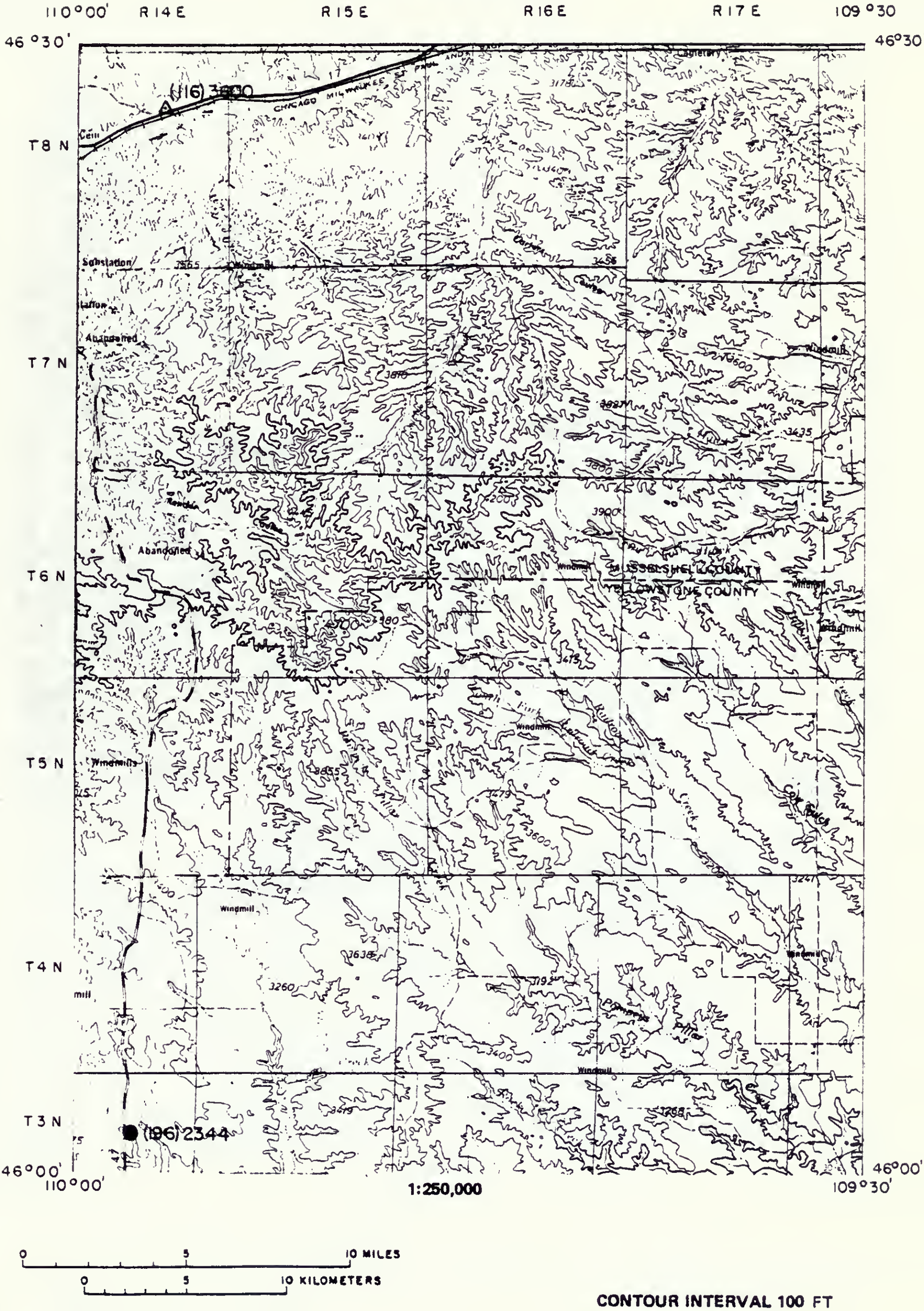
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

ROUNDUP 5



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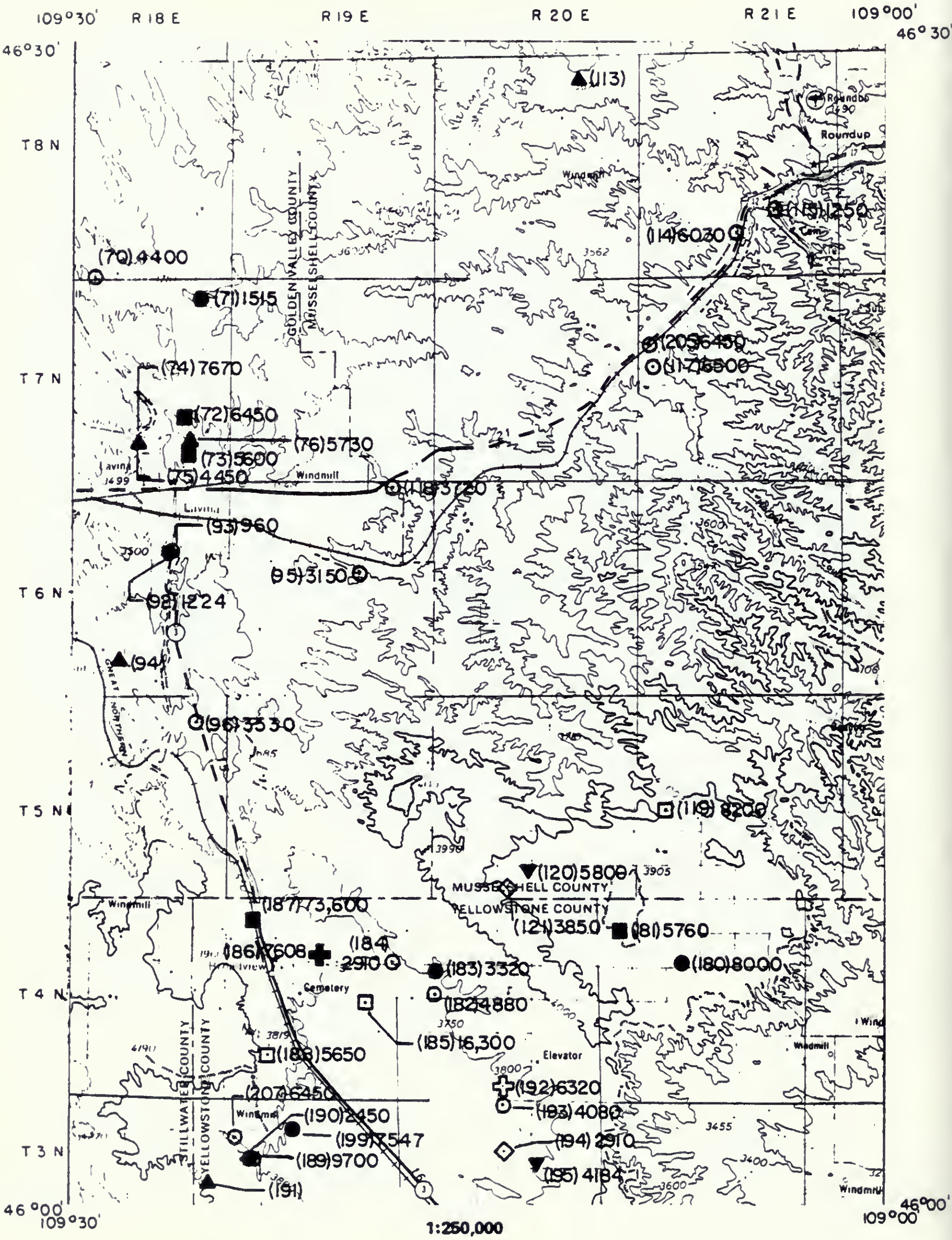

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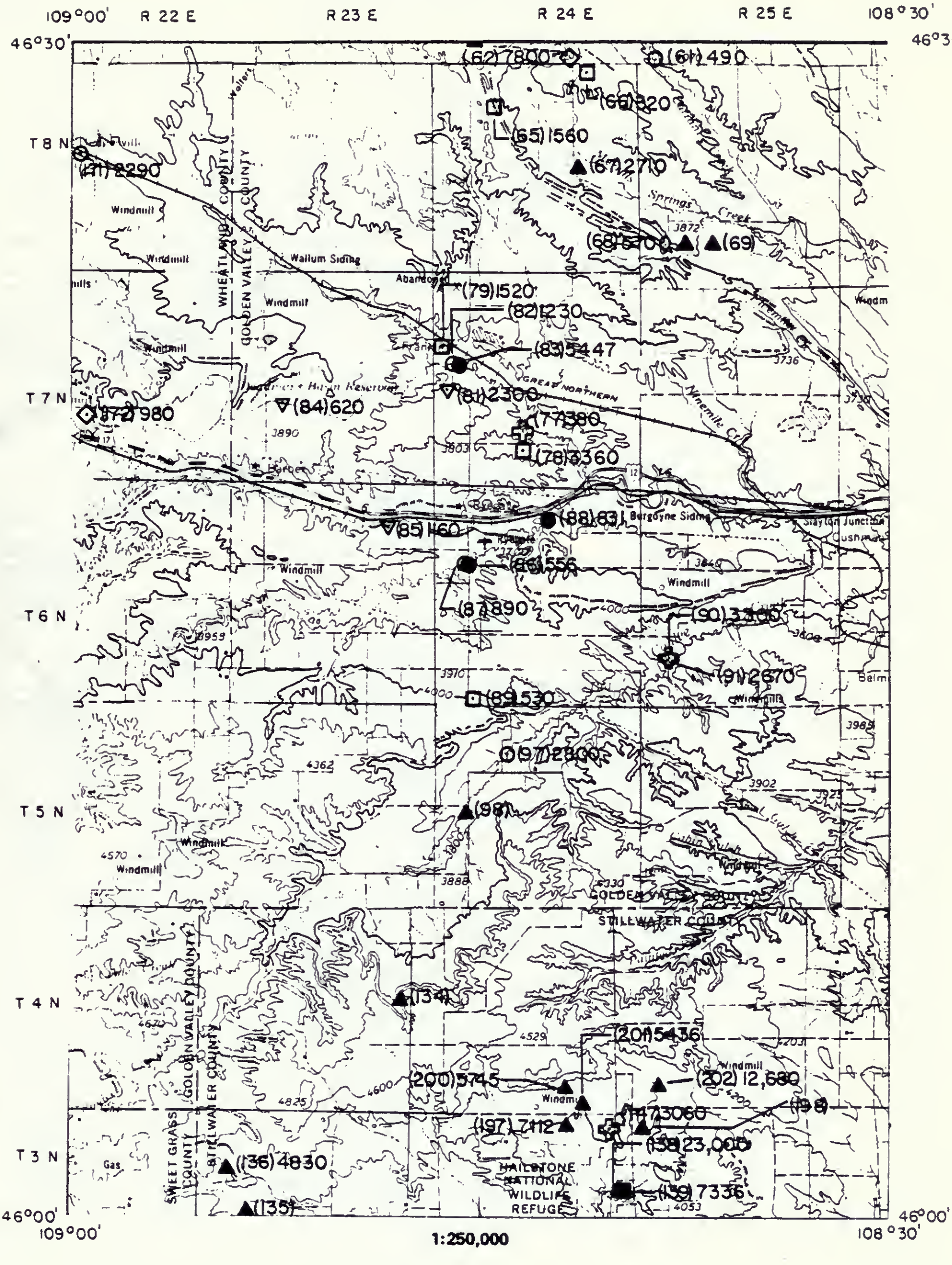
CONTOUR INTERVAL 100 FT



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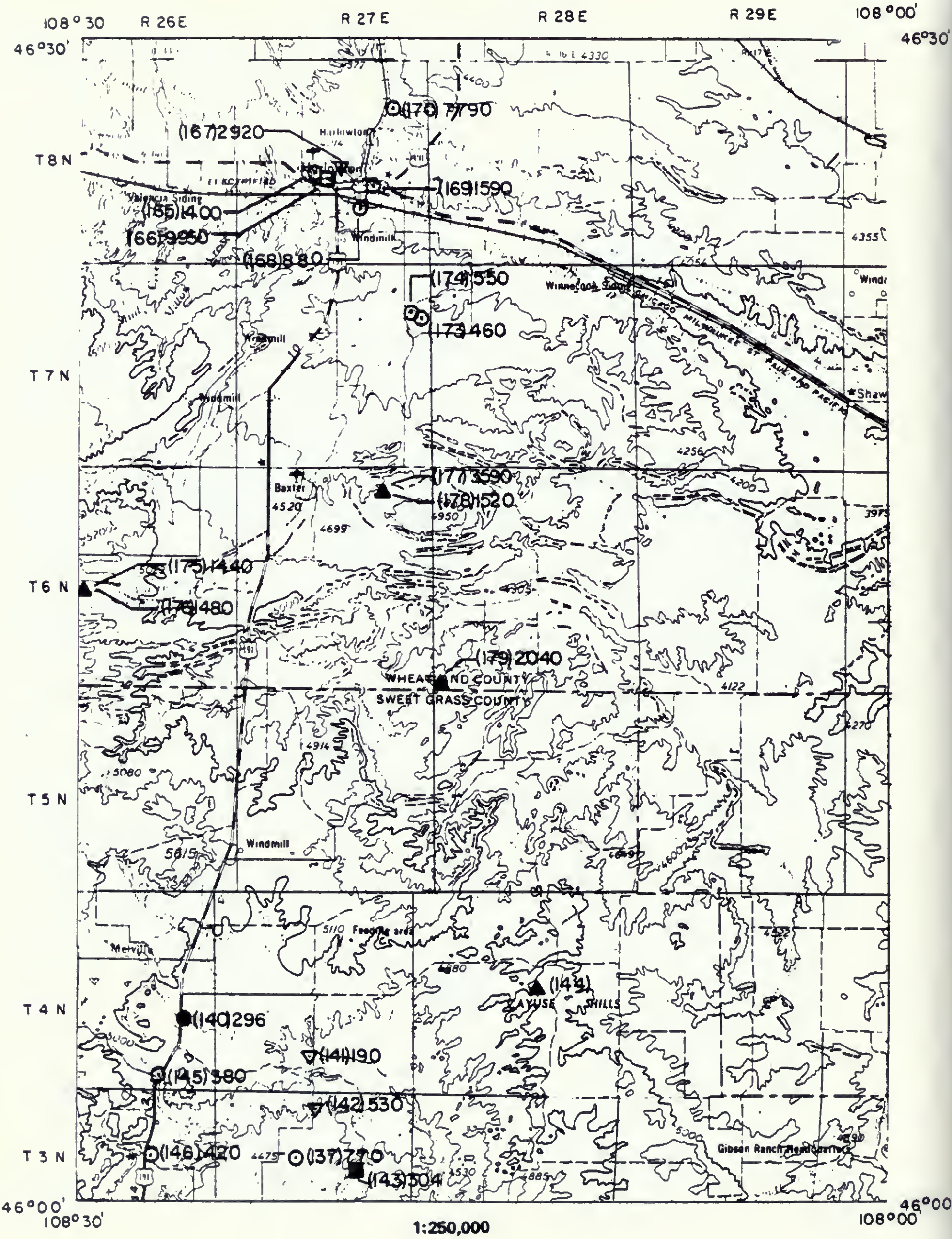
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



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0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

ROUNDUP 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or Yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG28	Fergus	14N 20E 28 BBAC		Well		Domestic use, water forms white deposits	2820	11		4550		80		Lodman
2	MBMG27	Fergus	14N 19E 11 BCAB		Well		Domestic use, water forms white deposits	1140	13		4340				Burck, Lee
3	MBMG24	Fergus	14N 18E 11 CBBB		Well	20 gpm	Stock use	510	15		4360		250		Luvinus
4	MBMG22	Fergus	14N 18E 21 DABB		Well		Domestic use, water forms white deposits	910	14		4630		132		Chapel
5	MBMG23	Fergus	14N 18E 09 BDCA		Spring		Domestic use, water contains much iron	580	16		4220				Gervais, Don
6	MBMG21	Fergus	14N 18E 18 BDAB		Spring		Domestic and stock use	340	16.2		4370				McCollum, Fay
7	64M0021	Fergus	14N 18E 18 BDB	03 28 67	Well	12 gpm	Stock use, well located 3.9 miles SE of Glengary			yes	4370	50	121	217KOTN	Apple, G.
8	MBMG15	Fergus	14N 17E 34 BDCB		Well		Domestic use	430	11		4400		200		Jennings, Clark
9	MBMG17	Fergus	14N 17E 10 CC		Creek	0.6 cfs		640	14		4200				
10	MBMG28	Fergus	14N 19E 05 DCBB		Creek		East Fork Big Spring Creek	1170	13		4170				
11	MBMG19	Fergus	14N 16E 10 DADB		Spring		Domestic and stock use	480	11		4150				Bricker, Don
12	MBMG1	Fergus	14N 16E 27 BBBB		Well	50 gpm	Domestic use	430	12		4230		100		Melichar, Les
13	MBMG2	Fergus	14N 16E 33 DADA		Well		Domestic use	480	16		4280				Borcherding
14	MBMG71	Judith Basin	14N 15E 28 BBAB		Well		Stock use and lawn irrigation, water is soft	1510	14		4040				Wichman
15	MBMG72	Judith Basin	14N 15E 28 BBAB		Well		Domestic use, water is soft, well is in house	1430	15		4040				Wichman
16	MBMG70	Judith Basin	14N 15E 18 DDAA		Well		Domestic use	650	13		4110				Stevenson
17	MBMG69	Judith Basin	14N 14E 24 BDAB		Well		Well is located 50 feet NE of house	660	14		4240		12		Pospisil
18	MBMG74	Judith Basin	13N 15E 23 CBCD		Well		Well is located 20 feet S of house	1320	11		4150				Shane
19	MBMG68	Judith Basin	14N 14E 23 ACDD		Spring		Spring is located 30 feet S of sheep shed	490	14		4270				Pospisil
20	MBMG73	Judith Basin	14N 14E 36 BCBD		Pond		Many cattails growing on E and W banks	460	24		4330				
21	MBMG66	Judith Basin	14N 14E 09 DABB		Well		Well is in basement, water is hard	400	14.9		4210				Watson
22	MBMG65	Judith Basin	14N 14E 08 DCAC		Creek	132 cfs	Water is clear	430	17		4230				
23	MBMG64	Judith Basin	14N 14E 17 ABAD		Well		Well is often pumped dry when watering lawn	640	12		4240		160		Eve, Jerry
24	MBMG67	Judith Basin	14N 14E 15 DAAA		Well			620	14		4250				Stevenson
25	MBMG75	Judith Basin	13N 16E 23 CBCD		Spring		Spring is located 90 feet NE of house	1690	12.8		4160				Shane
26	not on map														
27	MBMG76	Judith Basin	13N 15E 34 AAAB		Well		Stock use and lawn irrigation, water is hard	1230	19		4200		60		Horan
28	MBMG5	Fergus	13N 16E 18 DDD		Well		Domestic use	650	10		4280				Hannan, Wayne
29	MBMG4	Fergus	13N 16E 18 DCDD		Well		Domestic use except for drinking	610	13.6		4280				Hannan, Wayne
30	MBMG11	Fergus	13N 16E 30 DCDD		Well		Domestic use	660	11		4390				Wright, Roland

ROUNDUP 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

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31	MBMG3	Fergus	13N 16E 08 AD		Creek	0.7 cfs		510	12		4160				Hannan, Wayne
32	MBMG12	Fergus	13N 16E 10 ADD		Well		Domestic use	480	12		4380				Peters, Levern
33	MBMG13	Fergus	13N 17E 05 CDD		Well		Domestic use	520	11 5		4600				Waters, Harlic
34	64M0020	Fergus	13N 17E 05 CDC	03 28 87	Well	4 5 gpm	Domestic and stock use			yes	4590	12	175	217KOTN	Walker, R
35	MBMG14	Fergus	13N 17E 23 DAAC		Spring		Domestic and stock use	470	13		5000				
36	MBMG16	Fergus	13N 18E 06 DBCA		Spring	3 gpm	Domestic use	580	8		4600				Columbus, Reg
37	MBMG30	Fergus	13N 20E 02 BBBB		Reservoir		Stock use	1820	13		4600				Erickson
38	MBMG29	Fergus	13N 20E 02 BBBB		Spring		Domestic use, water forms green deposits	1000	15		4600				Erickson
39	MBMG32	Fergus	13N 21E 14 BCDA		Reservoir		Stock use	1200	15.5		4650				
40	MBMG33	Fergus	13N 21E 35		Spring		Domestic use	880	16 5		5000				Abbot, Darrell
40A	MBMG35	Fergus	13N 23E 06		Spring	3 gpm		520	9		4350				Finkbeiner
40B	MBMG34	Fergus	13N 22E 24		Pond		Formed by road construction	1010	12		4385				
41	MBMG8	Fergus	12N 16E 02 BCC		Well	8 gpm	Domestic use	1100	11.0		4900		68		Lemmon, Leo
42	MBMG6	Fergus	12N 18E 32 DDD		Well	3 gpm	Unused	2900	9		4450		250		Elliot, Glen
43	MBMG10	Fergus	12N 16E 07 DDDD		Well		Domestic use	660	12 5		4350				Gibbs, Lee
44	MBMG7	Fergus	12N 16E 32 DDD		Well		Domestic use, well is located by creek	2250	12 5		4450		12		Elliot, Glen
45	MBMG86	Judith Basin	12N 15E 22 CBAA		Well		Water is high in iron	2760	12.8		4400				Peterson
46	MBMG87	Judith Basin	12N 15E 22 BCDD		Well		Well is located 120 feet N of house	1240	11		4390	flowing	1060		Peterson
47	MBMG88	Judith Basin	12N 15E 34 BBBB		Well		Probably used for stock, water contains much iron	2430	12		4500				McDonald
48	MBMG84	Judith Basin	12N 16E 04 CDDD		Creek	1 cfs	West Buffalo Creek	820	18 3		4340				
49	MBMG83	Judith Basin	12N 14E 12 BBCC		Well		Well is located 300 feet S of house, seep is nearby	1650	10		4620	flowing			Gibbs, Lee
50	MBMG85	Judith Basin	12N 14E 24 DAAD		Well		Stock use, well is located 75 feet S of house	2690	11.9		4600				Cromer
51	MBMG82	Judith Basin	12N 14E 11 BBBC		Well		Well is at house	1400	10		4520	7	15		Gibbs, Lee
52	MBMG79	Judith Basin	12N 14E 09 DCAD		Well		Domestic use, water contains much iron	790	18		4710		90		McKinlay
53	MBMG81	Judith Basin	12N 14E 09 DDCD		Spring		Stock use, spring is located 75 yards from house	650	9		4710				McKinlay
54	MBMG80	Judith Basin	12N 14E 09 DCDA		Well		Stock use, well is located 75 yards W of house	940	11.5		4710	8	17		McKinlay
55	not on map														
56	not on map														
57	not on map														
58	MBMG9	Fargus	11N 18E 12 DBBB		Reservoir		Stock use	780	13.0		4600				

ROUNDUP 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

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59	WQB18	Golden Valley	09N 20E 24 CC	09 11 75	Pond		Near road	670			4400				
60	WQB16	Golden Valley	09N 20E 27 AD	09 11 75	Well			4100			4100	flowing			
61	WQB17	Golden Valley	09N 20E 36 D	09 11 75	Creek		Junction of Twin and Ashley Coulees	490			4070				
62	WQB15	Golden Valley	09N 20E 34 CC	09 11 75	Spring		Near Merrill Springs	7800			4000				
63	65M0041	Golden Valley	09N 20E 31 BD	04 01 65	Well		0.5 mile NE of Merrill Springs Creek	4280		yes	4180			320AMSD	
64	WQB19	Golden Valley	10N 19E 21 CC	09 11 75	Creek		Swimming Woman Creek	410			4380				
65	WQB13	Golden Valley	08N 20E 08 AB	09 11 75	Pond		NE of Ryegate Road	1560			4700				
66	WQB14	Golden Valley	08N 20E 02 BA	09 11 75	Pond		One acre in size, located NE of Ryegate Road	320			4000				
67	65M0040	Golden Valley	08N 20E 14 CC	03 17 65	Well			2710		yes	3900			211MRSN	
68	49M003	Golden Valley	08N 21E 29 CA	04 05 49	Well		One mile NW of Dry Lake	5700		yes	4030			320AMSD	
69	64M0016	Golden Valley	08N 21E 28 CB	04 29 64	Well	.75 gpm	One mile NW of Dry Lake			yes	4060			320AMSD	
70	WQB5	Golden Valley	08N 22E 32 DD	09 08 75	Creek		Currant Creek	4400			3700				
71	WQB29	Golden Valley	07N 22E 01 BBC	10 28 78	Creek	1 cfs	Currant Creek, 5.8 miles N of U.S. 12	1515		yes	3600				
72	WQB23	Golden Valley	07N 22E 23 DD	04 28 75	Pond		Stock tank 2.2 miles N of Lavina	6450		yes	3510				
73	WQB22	Golden Valley	07N 22E 26 DD	04 28 75	Pond		Stock tank one mile N of Lavina	5600		yes	3500				
74	64M0004	Golden Valley	07N 22E 27 CA	09 08 60	Well		Three miles E of Dry Lake	7670		yes	3670			217LKOT	
75	60M0010	Golden Valley	07N 22E 27 CA	09 08 60	Well			4450		yes	3670			331CRLS	
76	WQB30	Golden Valley	07N 22E 26 DA	10 28 76	Well		1.2 miles N of U.S. 12, Jensen-A well	5730		yes	3600				
77	WQB7	Golden Valley	07N 20E 28	09 11 75	Seep			380			3800				
78	WQB6	Golden Valley	07N 20E 33	09 11 75	Pond		NE of Ryegate	3360			3790				
79	WQB12	Golden Valley	07N 20E 18 BB	09 11 75	Pond		Near railroad tracks by Franklin Pond	1520			3750				
80	not on map														
81	WQB10	Golden Valley	07N 20E 19 BD	09 11 75	Ditch		NW of Ryegate, 0.5 mile from highway	2300			3810				
82	WQB11	Golden Valley	07N 20E 18	09 11 75	Creek		Careless Creek at bridge N of Ryegate	1230			3800				
83	WQB27	Golden Valley	07N 20E 18 DBC	10 28 76	Creek	5 cfs	Careless Creek N of Ryegate	5447		yes	3810				
84	WQB26	Golden Valley	07N 19E 20 CDB	10 28 78	Ditch	6 cfs	3.2 miles N of Barber	620			3890				
85	WQB25	Golden Valley	06N 19E 02 DCB	10 28 76	Ditch	0.6 cfs	2.2 miles W of Ryegate	1160			3800				
86	WQB20	Golden Valley	06N 20E 07 DD	05 09 75	Creek	50 cfs	Fish Creek S of Ryegate	556		yes	3800				
87	WQB8	Golden Valley	06N 20E 07 DD	09 11 75	Creek	8 cfs	Fish Creek S of Ryegate	890		no	3800				
88	WQB21	Golden Valley	06N 20E 03 CA	05 09 76	River	1490 cfs (M)	Musselshell River at Ryegate gaging station	831		yes	3700				

ROUNDUP 1° x 2° Sheet (Con't.)

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89	WQB8	Golden Valley	06N 20E 32 CC	09 11 75	Pond		E of road, N of Ryegate	530		no	4010				
90	WQB3	Golden Valley	06N 21E 30 DA	09 09 75	Seep			3300		no	4000				
91	WQB2	Golden Valley	06N 21E 30 DA	09 09 75	Coulee	3 cfs	Big Coulee	2670		no	4000				
92	WQB24	Golden Valley	06N 22E 11 C		River		Musselshell River at Lavine	1224		yes	3500				
93	WQB4	Golden Valley	06N 22E 11 C	09 09 75	River		Musselshell River at Lavine	960		no	3500				
94	32M0003	Golden Valley	06N 22E 28 DDC	02 09 32	Well		One mile E of Belmont			yes	3660			211FRNR	
95	WQB1	Golden Valley	06N 23E 15 AD	09 09 75	Creek	1 cfs	Painted Robe Creek	3150		no	3650				
96	WQB31	Golden Valley	05N 22E 01 CBD	10 28 78	Creek	4 cfs	Painted Robe Creek at highway	3530		no	3690				
97	WQB28	Golden Valley	05N 20E 09 BCC	10 28 78	Creek	5 cfs	Big Coulee at bridge	2800		no	2800				
98	46M0013	Golden Valley	05N 20E 19 AA	03 26 46	Well	0.7 gpm (M)	Ten miles S of Ryegate			yes	3700			217KOTN	
99	48M002	Golden Valley	11N 29E 01 CA	06 01 48	Well		Nine miles N of Musselshell River			yes	2980			331KBBY	
100	33M0008	Musselshell	11N 23E 20 AAB	07 01 33	Well	1240 gpm(M)	Thirty miles NW of Roundup			yes	3920			217LKOT	
101	00M0013	Musselshell	11N 23E 29 AC		Well		2.5 miles SE of Lake Mason			yes	3910			320TSLP	
102	49M0004	Musselshell	10N 22E 09 AC		Well		2.5 miles SE of Lake Mason			yes	3600			320AMSD	
103	33M0007	Musselshell	10N 25E 09 DD	02 20 33	Well					yes	3500			217KOTN	
104	60M0007	Musselshell	10N 28E 17 AA	10 60	Well		Four miles SW of Roundup	22700		yes	3110			320TYLR	
105	WQB15	Musselshell	10N 30E 07 BCA	10 19 78	Pond		Stock pond below North Willow Creek	870		no					
106	68M0002	Musselshell	10N 29E 18 BD	07 30 68	Well	2 gpm (M)	Ten miles NE of Musselshell	4630		yes	3080			217KOTN	
107	WQB16	Musselshell	10N 29E 23 DDD	10 19 78	Ditch	.1 cfs	Water drains from a pond below an oil well	20000		yes	3000				
108	64M0018	Musselshell	09N 26E 21 CA	10 05 64	Well	16 gpm (E)	One mile NE of Roundup			yes	3570			320AMSD	
109	WQB2	Musselshell	09N 25E 09		Creek		South Willow Creek	2300		no	3650				
110	64M0015	Musselshell	09N 23E 21 BB	01 31 64	Well			5030		yes	3660			211LKOT	
111	not on map														
112	68M0001	Musselshell	09N 23E 20 AA	08 14 68	Well					yes	3680			211EGLE	
113	64M0014	Musselshell	08N 24E 02 B	08 31 64	Well					yes	3630			217LKOT	
114	WQB3	Musselshell	08N 25E 28 DAA	10 18 78	Creek	.01 cfs (E)	Cameron Creek on Highway 12	6030		no	3550				
115	WQB10	Musselshell	08N 25E 23 CCC	10 19 78	Creek	1.2 cfs (E)	Half Breed Creek near its mouth	1250		no	3650				
116	WQB11	Musselshell	08N 26E 11 BBB	10 19 78	Creek	05 cfs (E)	Willow Creek one mile E of Roundup	3600		no	3550				
117	WQB5	Musselshell	07N 25E 18 CAB	10 18 78	Creek		Goulding Creek at its mouth	6600		no					
118	WQB6	Musselshell	07N 23E 35 DC	10 19 76	Creek		Dean Creek at bridge on Highway 12	3720		no					

ROUNDUP 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map rel. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
119	WQB9	Musselshell	06N 25E 19 ADA	10 18 76	Pond		Part of swamp that occupies most of T5N, R24E	8200		no	3900				
120	WQB8	Musselshell	05N 24E 33 AAD	10 19 76	Ditch		Drain from swamp in T5N, R24E	5800		yes	3950				
121	WQB7	Musselshell	05N 24E 33 CAC	10 18 78	Spring		Issues from swamp in T5N, R24E	3850		no	3900				
122	MBMG15	Petroleum	14N 28E 29 C	08 07 78	Well		Domestic use except for drinking, water is corrosive	6900	18.5	no	2900			211EGLE	Lowen
123	MBMG16	Petroleum	14N 28E 27	08 76	Coulee		Above Flat Willow Creek	5860	16	no	2790				
124	58M0006	Petroleum	13N 26E 04 BD	10 06 58	Well		Six miles NE of Roundup	7830		yes	3160			320AMSD	
125	MBMG29	Petroleum	13N 26E 15		Spring		Thirty feet below a reservoir	2810	14	no	3200				Mik, Tony
126	MBMG28	Petroleum	13N 26E 15		Reservoir			2120	15	no	3200				
127	MBMG27	Petroleum	13N 26E 34 CA		Creek	2 cfs	Flat Willow Creek	2440	13.8	no	3200				
128	MBMG31	Petroleum	13N 26E 01		Well			2390	19	no	3000	flowing			Raund, Bob
129	38M0001	Petroleum	13N 28E 22 D	09 16 38	Well		Six miles SE of Petrolia Lake			yes	3200			211EGLE	
130	MBMG26	Petroleum	12N 27E 03 AA		Well	10 gpm	Stock use	4090	14	no	3180		240		
131	MBMG24	Petroleum	12N 27E 07		Well		Stock use	780	13.5	no	3220		40	110ALVM	
132	MBMG25	Petroleum	12N 27E 06		Well		Domestic use	1440	13	no	3230		110	211EGLE	Johnkin, Jim
133	00M0014	Petroleum	12N 25E 05 DC		Well		Approximately 4.5 miles NW of Roundup			yes	3880			320TSLP	
134	46M0012	Stillwater	04N 19E 13 DB	03 26 46	Well	4 gpm (E)	Fifteen miles S of Ryegate			yes	4220			217KOTN	
135	29M0001	Stillwater	03N 19E 17 CD	11 29	Well	290 gpm (E)	Eighteen miles SW of Ryegate			yes	4500			331MDSN	Crawford
136	54M0006	Stillwater	03N 19E 07 DA	12 22 54	Well		SW of Ryegate	4830		yes	4380			337MSNC	
137	WQB9	Sweet Grass	03N 15E 09 CDD	10 27 76	Creek	0.1 cfs (E)	Alkali Creek	770		no	4480				
138	WQB8	Stillwater	03N 21E 18 BD		Creek	2 cfs (E)	Luke Creek	23000		yes	4000				Wilcox
139	WQB7	Stillwater	03N 21E 18 BD		Tank		Stock tank	7336		yes	4000				Wilcox
140	WQB13	Sweet Grass	04N 14E 24 CBC	10 27 78	Creek	10 cfs (E)	Sweet Grass Creek on U.S. 191	296		yes	5000				
141	WQB12	Sweet Grass	04N 15E 28 DDA	10 27 76	Ditch	2 cfs (E)	Cayuse Creek	190		no	4780				
142	WQB11	Sweet Grass	03N 15E 03 BCC	10 27 76	Ditch	0.1 cfs (E)	Sweet Grass Lower Canal	530		no	4450				
143	WQB10	Sweet Grass	03N 15E 14 BAA	10 27 76	Reservoir		Glasston Lake (lower reservoir)	304		yes	4500				
144	44M0001	Sweet Grass	04N 16E 15 DC	09 04 44	Well		Fourteen miles N of Billings			yes	3590			320AMSD	
145	WQB14	Sweet Grass	04N 14E 35 BDD	10 27 78	Creek	3 cfs (E)	Otter Creek	380		no	6000				
146	WQB15	Sweet Grass	03N 14E 11 CBD	10 27 76	Creek	2 cfs (E)	Wheeler Creek	420		no	5000				
147	WQB9	Stillwater	03N 21E 06 CB		Seep		One mile S of Jim Hoaglund's place	3060		no	4000				
148	WQB9	Wheatland	11N 17E 34	09 11 75	Creek		West Galloway Creek	1190		no	5000				

ROUNDUP 1° x 2° Sheet (Con't.)

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149	WQB8	Wheatland	11N 17E 33	09 11 75	Creek	1 cfs (E)	Blake Creek	560		no	5000				
150	WQB2	Wheatland	11N 15E 35 AC	09 11 75	Creek	5 gpm (E)	Stephens Gulch	980		no	4800				
151	WQB3	Wheatland	11N 15E 32	09 11 75	Creek	0.5 cfs (E)	Roberts Creek	740		no	4800				
152	WQB4	Wheatland	10N 15E 09 BQ	09 11 75	Reservoir		Rangeland and cropland	730		no	4780				
153	WQB5	Wheatland	11N 15E 36 DD	09 11 75	Reservoir			2110		no	4690				
154	WQB1	Wheatland	10N 18E 06 B	09 11 75	Reservoir		Rangeland	750		no	4640				
155	WQB28	Wheatland	10N 15E 34 AD	09 11 75	Creek		Roberts Creek	660		no	4780				
156	WQB7	Wheatland	10N 16E 18	09 11 75	Reservoir		Lined with alkali	5170		no	4600				
157	WQB8	Wheatland	10N 16E 17	09 11 75	Well		Water from well is turbid	240		no	4600				
158	WQB27	Wheatland	10N 16E 18 A	09 11 75	Seep		Rangeland seep	340		no	4610				
159	WQB10	Wheatland	10N 17E 02	09 11 75	Creek	1 cfs (E)	Galloway Creek	820		no	4800				
160	WQB11	Wheatland	10N 17E 01	09 11 75	Creek	2 cfs	Timber Creek	520		no	5000				
161	WQB12	Wheatland	10N 18E 08	09 11 75	Creek	1 cfs (E)	Bercails Creek	670		no	5000				
162	WQB14	Wheatland	10N 18E 11	09 11 75	Creek	5 cfs (E)	Careless Creek	450		no	5000				
163	WQB13	Wheatland	10N 18E 09	09 11 75	Creek	1 cfs (E)	Little Careless Creek	890		no	4850				
164	WQB28	Wheatland	10N 18E 20 DA	09 11 75	Creek	4 cfs (E)	Careless Creek	910		no					
165	WQB21	Wheatland	08N 15E 21 BA	09 11 75	Coulee	1 cfs (E)	Dryland farming area	1400		no					
166	WQB19	Wheatland	08N 15E 21 AC	09 11 75	Pond		Saline pond near Harlowton airport	8950		no					
167	WQB20	Wheatland	08N 15E 22 BB	09 11 75	Drain	0.5 cfs (E)	Drainage from dryland farming area	2920		no					
168	WQB22	Wheatland	08N 16E 27	09 12 75	River		Musselshell River at Harlowton	880		no					
169	WQB18	Wheatland	08N 15E 23	08 11 75	Creek	2 cfs (E)	Antelope Creek	1590		no					
170	WQB29	Wheatland	08N 15E 11 A	09 11 75	Creek		Antelope Creek	7790		no					
171	WQB15	Wheatland	08N 18E 17	09 11 76	Creek		Roberts Creek	2290		no					
172	WQB30	Wheatland	07N 18E 29 A	09 11 75	Spring		Weeping Wall, 3 miles E of Shawmut	980		no					
173	WQB16	Wheatland	07N 15E 12	09 11 75	Creek	8 cfs (E)	American Fork, rangeland	460		no					
174	WQB17	Wheatland	07N 16E 12	09 11 75	Creek	5 cfs (E)	Lebo Creek	550		no					
175	56M0003	Wheatland	06N 14E 20 BAA	04 28 56	Well		Twelve miles SW of Harlowton	1440		yes	4990			217LKQT	
176	58M0008	Wheatland	08N 14E 20 BAA	04 29 56	Well		0.5 miles NW of Fish Creek	1480		yes	5090			320AMSO	
177	56M009	Wheatland	08N 15E 02 BOC	04 29 56	Well		0.5 miles SE of American Fork	3690		yes	4800			320AMSD	
178	67M0002	Wheatland	06N 15E 02 BOC	07 08 57	Well		Nine miles S of Harlowton	1520		yes	4810			217KQTN	

ROUNDUP $1^{\circ} \times 2^{\circ}$ Sheet (Con't.)

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179	60M003	Wheatland	06N 16E 31 CC	08 60	Well		Fifteen miles SE of Harlowton	2040		yes	4300			211EGLE	
180	WQ814	Yellowstone	04N 25E 09 CDC	06 25 76	Creek			8000		yes	3950				
181	WQ815	Yellowstone	04N 25E 06 CO	06 25 76	Pond		Small puddle	5760		yes	3900				
182	WQ838	Yellowstone	04N 24E 17 CC	10 04 76	Creek	no flow	Five miles E of Broadview	4880		no	3800				
183	WQ816	Yellowstone	04N 24E 17 BB	06 25 76	Creek	1.6 cfs (E)	Unnamed creek	3320		yes	3800				
184	WQ827	Yellowstone	04N 23E 12 DD	04 09 76	Creek	0.5 cfs (E)	3.5 miles E of Broadview	2910		no	3800				
185	WQ839	Yellowstone	04N 23E 24 BB	10 04 76	Pond	no flow	Three miles E SE of Broadview	18300		no	3780				
186	WQ828	Yellowstone	04N 23E 10 D	04 09 76	Seep	< 1 gpm	Seep drainage 1.5 miles E of Broadview	7608		yes	3960				
187	WQ840	Yellowstone	04N 23E 05 DD	10 04 76	Pond	no flow	One mile N of Broadview	73600		yes	4900				
188	WQ854	Yellowstone	04N 23E 28 CC	10 13 76	Pond	no flow	Just above a saline seep	6650		no	3820				
189	WQ829	Yellowstone	03N 23E 08 DD		Creek	< 0.5 cfs (E)	At a culvert 7 miles S of Broadview	9700		no	3810				
190	WQ856	Yellowstone	03N 23E 08 DD	10 13 76	Creek	2 cfs (E)	Comanche Creek, banks lined with salt	2450		yes	3810				
191	40M0002	Yellowstone	03N 23E 18 BD	05 28 40	Well					yes	4000			221MRSN	
192	WQ837	Yellowstone	04N 24E 34 CB	10 04 76	Seep	no flow	One half mile N of crossroads	6320		no	3790				
193	WQ836	Yellowstone	03N 24E 03 BB	10 04 76	Creek	15 gpm (E)	Small creek one quarter mile S of crossroads	4080		no	3560				
194	WQ825	Yellowstone	03N 24E 10 CB	06 25 76	Spring		Small seep	2910		no	3770				
195	WQ826	Yellowstone	03N 24E 11 CC	06 25 76	Ditch			4184		yes	3760				
196	WQ813	Yellowstone	03N 26E 11 CCC	06 25 76	Creek		North Fork Crooked Creek	2344		yes					
197	76M0231	Stillwater	03N 20E 02 ADBA	04 08 76	Well		Brickley Test Area - Rapelje R10 B2-74	7112		yes		18	23	110CLVM	
198	46M0015	Sweet Grass	03N 21E 05 BC	03 27 46	Well	4 gpm (E)	Twenty-five miles NW of Billings			yes	4250			320TLSP	
199	76M0573	Yellowstone	03N 23E 04 DD	04 09 76	Creek	1 cfs (E)	Brown Creek at bridge	7547		yes					
200	76M0230	Stillwater	04N 20E 35 ACAA	04 08 76	Well		Brickley Test Area - Rapelje R13-BS-74	5745		yes		36	53	110CLVM	
201	76M0232	Stillwater	04N 20E 36 CCBA	04 08 76	Well		Brickley Test Area - Rapelje R36-B21-75	6436		yes		30	38	110CLVM	
202	76M0233	Stillwater	04N 21E 32 ACAA	04 08 76	Well		Hoagland Test Area - Rapelje R2-H2-74	12680		yes			18	110CLVM	
203	64M0017	Musselshell	09N 23E 20 AA	04 08 64	Well			4690		yes	3680			320AMSD	
204	73M0842	Fergus	12N 22E 13 DD	08 15 73	Spring	1 gpm (E)	Durfee Spring, 4.6 miles S of Bar Ranch	2536		yes	4500			331MDSN	
205	WQ84	Musselshell	07N 25E 07 CCD	10 18 76	Creek	.08 cfs (E)	Currant Creek on Highway 12	6450		no					Formerly 117B
206	MBMG30	Petroleum	13N 26E 02 CDC	09 13 76	Coulee		Coulee leading in Yellow Water Creek, algal sample taken	43330	13	no	3150				Formerly 128B
207	WQ855	Yellowstone	03N 23E 08 BAA	10 13 76	Creek	no flow	In a saline seep area	6460		no	3800				Formerly 188B

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo Day Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
7	14N 18E 18 BDB	03 28 67	Well	39	25	20*		.22			171		4	74
34	13N 17E 05 CDC	03 28 67	Well	55	10	73*		.75			220		3	144
63	09N 20E 31 BD	04 01 65	Well	8	3	1100	10				1650	180	270	500
67	08N 20E 14 CC	03 17 65	Well	9	3	790	10				1930		130	
68	08N 21E 29 CA	04 05 49	Well	470	120	730*					695		370	2100
69	08N 21E 28 CB	04 29 64	Well	570	110	560*					485		300	2200
71	07N 22E 01 BBC	10 28 76	Creek	92	64	165	5.6				262		12	680
72	07N 22E 23 DD	04 28 75	Pond	46.1	11.6	1780					1060	10	19.5	3020
73	07N 22E 26 DD	04 28 75	Pond	10.8	13.4	1530					905		33	2560
74	07N 22E 27 CA	09 08 60	Well	11	2	2100*					3660		1200	15
75	07N 22E 27 CA	09 08 60	Well	570	120	380*					305		160	2200
76	07N 22E 28 DA	10 28 76	Well	19.8	5.1	1415	5				855	17	36	2260
83	07N 20E 18 DBC	10 28 76	Creek	488	190	590	72				226		335	2600
86	06N 20E 07 DD	05 09 75	Creek	39.4	17.8	46	2				185		6.5	110
88	08N 20E 03 CA	05 09 75	Creek	57	26.5	63	2				211		6.5	190
92	06N 22E 11 C	09 09 75	River	85	53	119	3.6				296		10	420
94	06N 22E 28 DDC	02 09 32	Well	43	17	4700*					775		7000	
98	05N 20E 19 AA	03 26 46	Well			2300*					1830	109	2400	
99	11N 29E 01 CA	06 01 48	Well	290	54	2000*					280	109	1300	2800
100	11N 23E 20 AAB	07 01 33	Well	15		280*					600		11	140
101	11N 23E 29 A		Well	280	79	1000*					305		7600	5900
102	10N 22E 09 AC	49	Well	64	39	1900*					4850	121	160	
103	10N 25E 09 DD	02 20 33	Well			1200*					1220		1200	45
104	10N 28E 17 AA	10 60	Well	400	60	6100*					805		2700	9600
106	10N 29E 18 BD	07 30 68	Well	3	2	1200*					1650	165	570	190
107	10N 29E 23 DDD	10 19 76	Ditch	224	58	5490	51				1586		2069	6180
108	09N 26E 21 CA	10 05 64	Well	170	26	4400*					813		2100	6200
110	09N 23E 21 BB	01 31 64	Well	9	2	1500*					2800	185	460	
112	09N 23E 20 AA	08 14 68	Well	2	10	630*					514	.	64	870
113	08N 24E 02 B	08 31 64	Well	6	12	2300*					2310	337	1700	140
120	05N 24E 33 AAD	10 19 78	Ditch	273	189	1030	13				470		274	2860
124	13N 26E 04 BD	10 06 58	Well	83	37	2000*					671	60	190	3700
129	13N 28E 22 D	09 18 38	Well			770*					1000	109	180	410
133	12N 25E 05 DC		Well	60	34	520*					440		18	1000
134	04N 19E 13 DB	03 26 46	Well			1700*					1860	96	1400	
135	03N 19E 17 CD	11 29	Well	350	64	330*					350		220	1300
136	03N 19E 07 DA	12 22 54	Well	590	130	530*					600		340	2100
138	03N 21E 18 BD	04 21 76	Creek	321	1797	2650	19				195	61	365	13000
139	03N 21E 18 DB	04 21 76	Tank	461	449	1000	9				810		138	4200
140	04N 14E 24 CBC	10 27 76	Creek	37.4	11.3	11.0	1.8				189		1.3	14
143	03N 15E 14 BAA	10 27 76	Reservoir	30.9	10.4	18.0	3.1				165		3.2	2
144	04N 16E 15 DC	09 04 44	Well	270	46	500*					325		75	1500
175	06N 14E 20 BAA	04 29 56	Well	8	7	480*					740	84	53	260
176	06N 14E 20 BAA	04 29 56	Well	12	40	300*					645		39	260
177	08N 15E 02 BDC	04 26 56	Well	240	130	520*					465		67	1700

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated
* Values reported as sodium plus potassium

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
7		.4		10			199	140		USGS	121	217KOTN	No	64M0021
34		.7		10			179	180		USGS	195	217KOTN	No	64M0020
63			8.8			2884	32	1650	84.2	Unknown		320AMSO	No	65M0041
67			8.3				35	1580	58.3	Unknown		211MRSN	No	65M0040
68			6.9				1670	570		Unknown		320AMSD	No	49M0003
69							1880	398		Unknown		320AMSO	No	64M0018
71	<.01		8.1		1515	1149	495	215	3.2	WQB			No	76W2654
72	.12		8.37	10	6450	5948	163	865	60.7	WQB			No	75W0600
73	.32		8.16	10	5600	5056	82	742	73.5	WQB			No	75W0601
74			7.9				36	3000		Unknown		217LKOT	No	60M0004
75			7.9				1920	250		Unknown		331CRLS	No	60M0010
78	.56		8.4		5730	4179	70	729	73.6	WQB			No	76W2652
83	.49		7.8		5447	4387	2000	185	5.7	WQB			No	76W2650
86	.37	.24	7.87		556	408	172	152	1.5	WQB			Yes	75W0627
68	.25	.25	7.88		831	556	251	173	1.7	WQB			Yes	75W0633
92	.02		8.29	18	1224	987	430	243	2.5	WQB			No	75W1905
94							177	636		Unknown		211FRNR	No	32M0003
98								1680		Unknown		217KOTN	No	46M0013
99			8.1				946	411		Unknown		331KBBY	No	48M0002
100							37	492		Unknown		217LKOT	No	33M0008
101							1020	250		Unknown		320TSLP	No	00M0013
102			7.5				320	4160		Unknown		320AMSO	No	49M0004
103								1000		Unknown		217KOTN	No	33M0007
104			7.4				1250	660		Unknown		320TYLR	No	60M0007
106			8.9	58.3			16	1660		Unknown		217KOTN	No	68M0002
107	.02		7.9		20010	14850	800	1300	84.5	WQB			Yes	76W2597
108			7.7				532	667		Unknown		320AMSO	No	84M0018
110			8.6				31	2600		Unknown		217LKOT	No	64M0015
112			7.8				46	422		Unknown		211EGLE	No	68M0001
113			9.2				84	2460		Unknown		217LKOT	No	64M0014
120	.03		8.2		5800	4870	1460	385	11.7	WQB			No	76W2592
124			8.8				360	650		Unknown		320AMSD	No	58M0006
129								1000		Unknown		211EGLE	No	38M0001
133							290	361		Unknown		320TSLP	No	00M0014
134			8.3					1690		Unknown		217KDTN	No	46M0012
135				69.4			1140	287		Unknown		331MDSN	No	29M0001
136			7.5				2010	492		Unknown		337MSNC	No	54M0006
138	.26		8.98	15	23000	18410	8200	261	12.7	WQB			No	76W0659
139	24		7.64	11	7336	6891	3000	500	7.9	WQB			No	76W0658
140	.08		8.2		296	170	140	155	.4	WQB			No	76W2654
143	<.01		8.1		304	167	120	135	.7	WQB			No	76W2653
144							884	267		Unknown		320AMSO	No	44M0001
175			8.3				49	747		Unknown		217LKOT	No	56M0003
176			6.3				195	529		Unknown		320AMSO	No	56M0008
177			7.8				1130	381		Unknown		320AMSD	No	56M0009

Chemical Analyses

Map ref. no	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SD_4)
178	06N	15E	02	BDC	07	08	57	Well			410*					200	217	83	240
179	06N	16E	31	CC	08		60	Well	6	2	570*					1200	59	83	54
180	04N	25E	09	CDC	06	25	76	Creek	345	590	1060	9.5				470		399	4480
181	04N	25E	06	CD	06	25	76	Pool	359	494	424	26.2				544		293	2900
183	04N	24E	17	BB	06	25	76	Creek	138	168	386	7.6				486		278	1036
186	04N	23E	10	D	04	09	76	Seep	337	456	1140	13.0				571		360	4100
187	04N	23E	05	DD	10	04	76	Pond	320	7610	29000	125				508		3300	71000
190	03N	23E	08	DD	04	09	76	Creek	401	869	2950	13.4				532		480	9650
191	03N	23E	18	BD	05	28	40	Well			1300*					3120		260	
195	03N	24E	11	CC	04	09	76	Ditch	168	133	700	7.8				607	7	279	1550
196	03N	28E	11	CCC	06	25	76	Creek	36.1	6.2	500	8.2				682		34	569
197	03N	20E	02	ADBA	04	08	76	Well	440	490	920	14	.20	.05	7.4	326		38	4611
198	03N	21E	05	BC	03	27	46	Well	510	130	340*					330		57	1900
199	03N	23E	04	DD	04	09	76	Creek	313	301	1300	8.8				450	4	196	3980
200	04N	20E	35	ACAA	04	08	76	Well	376	324	720	8.4	.32	.02	7.6	219		24	3540
201	04N	20E	36	CCBA	04	08	76	Well	472	356	460	16	.12	.11	7.8	318		302	2759
202	04N	21E	32	ACAA	04	08	76	Well	196	1064	2250	14	.20	.18	7.1	498		260	8644
203	09N	23E	20	AA	04	08	64	Well	42	8	1300*					2680		470	110
204	12N	22E	13	DD	08	15	73	Spring	533	185	14	3.2	.09	.02	<.1	59		4.1	1872

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

of Selected Waters

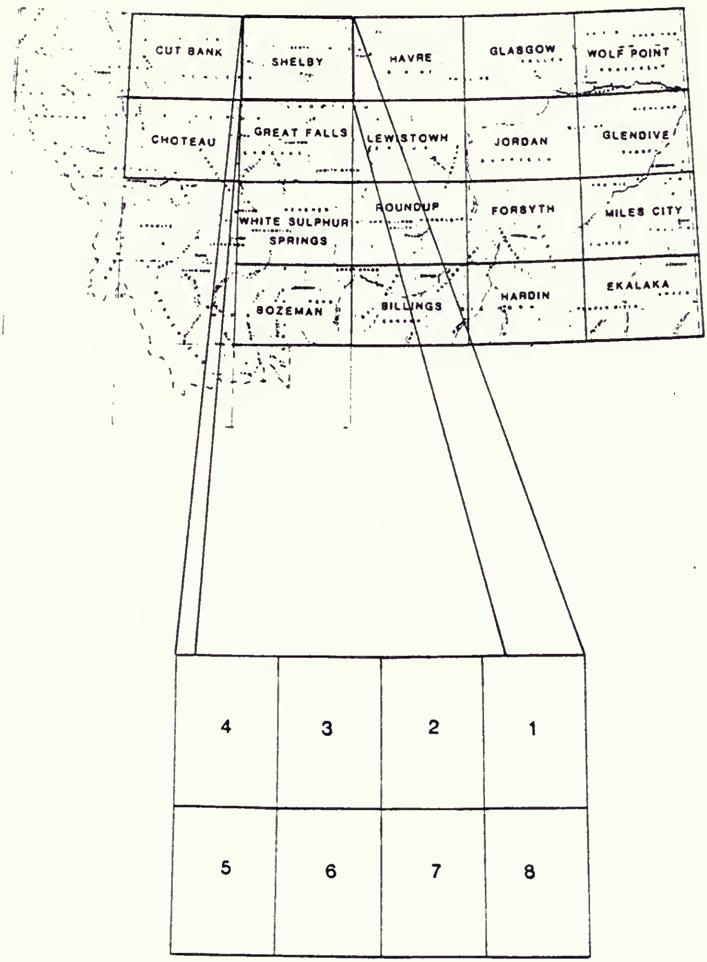
Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
178			9.4					526		Unknown		217KDTN	No	57M0002
179			8.2				23	1080		Unknown		211EGLE	No	60M0003
180	.13	.18	7.85	14.1	8000	7115	3290	385	8.0	WQB			Yes	76W1221
181	.02	.06	7.45	14.8	5760	4765	2930	447	3.4	WQB			Yes	76W1222
183	1.6	.24	8.0	14	3320	2255	1040	398	5.2	WQB			Yes	76W1223
186	.5		7.99	15	7608	6978	2720	468	9.5	WQB			No	76W0571
187			7.7		73600	111600	32100	415	70.4	WQB			Yes	76W2510
190	1		7.8	20	12450	14900	4580	436	19.0	WQB			No	76W0572
191								2560		Unknown		221MRSN	No	40M0002
195	.3		8.3	17	4184	3452	968	509	9.8	WQB			No	76W0570
196	.08	.85	8.25	13.8	2344	1490	115	559	20.3	WQB			Yes	76W1220
197	5.704	.3	7.63	10.5	7112	6687	3120	268	7.2	MBMG	23	110CLVM	Yes	76M0231
198							1810	271		Unknown		320TSLP	No	46M0015
199	3.2		8.27	17	7547	6556	2020	375	12.6	WQB			No	76W0573
200	.865	.4	7.91	11	5745	5109	2270	179	8.8	MBMG	53	110CLVM	Yes	76M0230
201	17.169	.1	7.75	12	5438	4647	2640	261	3.9	MBMG	38	110CLVM	Yes	76M0232
202	26.431	.5	7.95	7	12680	12710	4870	408	14.0	MBMG	18	110CLVM	Yes	76M0233
203			8.4				138	2200		Unknown		320AMSO	No	64M0017
204		1.8	8.08		2535*	2622	2000	48	.1	MBMG		331MDSN	No	73M0842

ROUNDUP 1° x 2° Sheet

Trace Elements Analyses Sheet

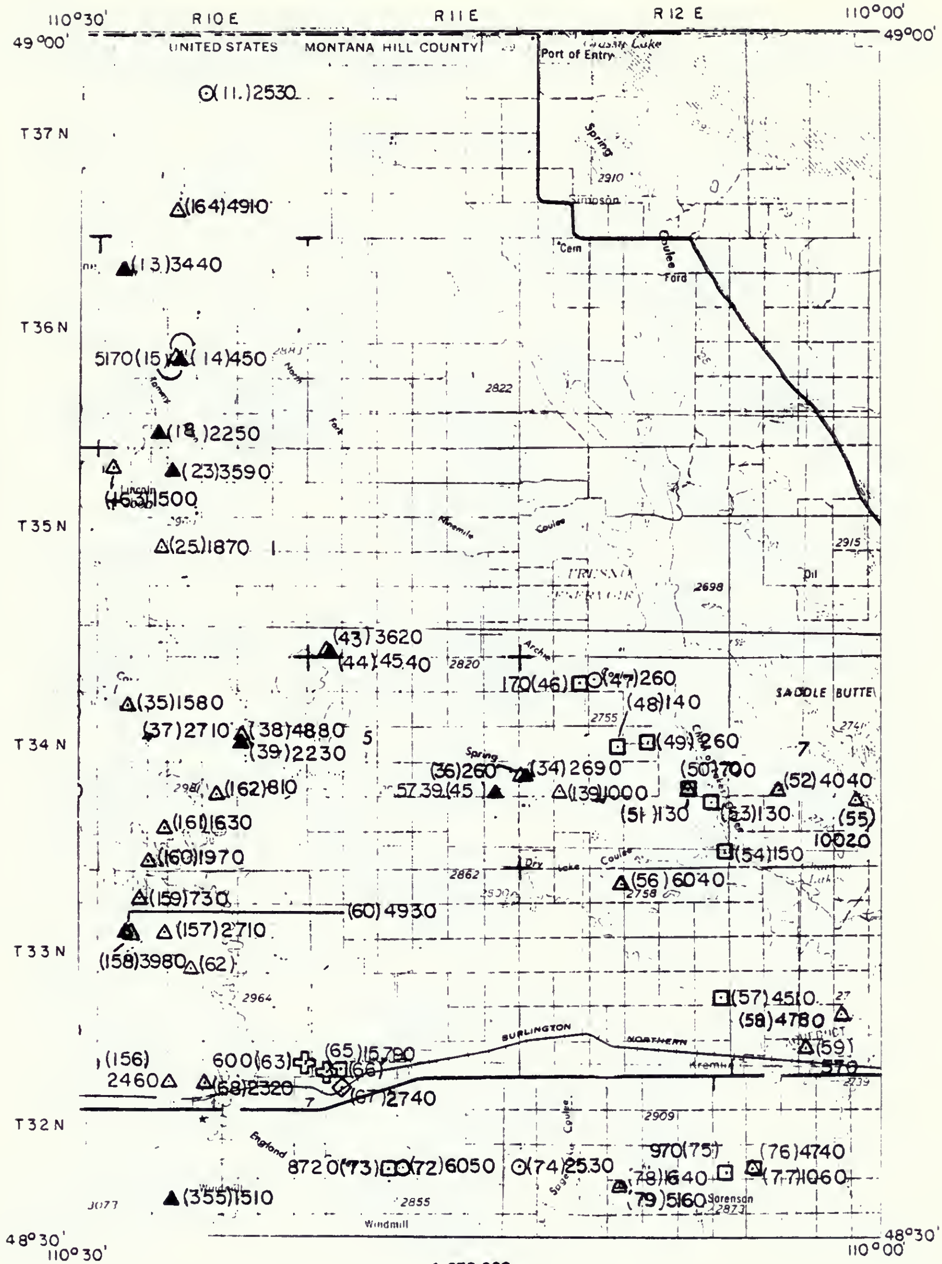
Map ref no	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
86	06N 20E 07 DD			7		08	.01		.05										.17	75W0627
88	06N 20E 03 CA			3		.10	.004		.03										.11	75W0633
107	10N 29E 23 DDD			<1.0						<.05			.08			.02	7.8			76W2597
180	04N 25E 09 CDC			2	<10	.15	.016	<.05	.02	<.05	.03	<.2	.11		7				<.01	76W1221
181	04N 25E 06 CD			7	<10	.27	.013	<.05	.01	<.05	.03	<.2	.08		<1.0				<.01	76W1222
182	04N 24E 17 BB			3	<10	<.10	.007	<.05	.01	<.05	.03	<.2	<.05		19				<.01	76W1223
187	04N 23E 05 DD			<1.0						<.05			.68			.16	10			76W2510
186	03N 26E 11 CCC			8	<10	.16	<.001	<.05	.01	<.05	.01	<.2	<.05		1.0				<.01	76W1220
197	03N 20E 02 ADBA	.15	.4	<2.0	< 5	.8	.02	.01	.02	.18	.70	<.3	.09	.013	33		7.3	.58	.05	76M0231
200	04N 20E 35 ACAA	.27	<.2	<2.0	< 6	.7	.01	.01	.02	.13	.48	<.3	.07	.026	24		7.8	.40	.05	76M0230
201	04N 20E 36 CCBA	.08	<.2	<2.0	< 5	.6	.01	.02	.02	.14	.48	<.3	.08	.016	1220		8.7	.4	.03	76M0232
202	04N 21E 32 ACAA	.27	.43	<2.0	< 5	.7	.02	.03	.04	.23	.84	<.3	.14	.026	1800		14.8	1.04	.05	76M0233

LOCATION BASE MAP



SHELBY 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY



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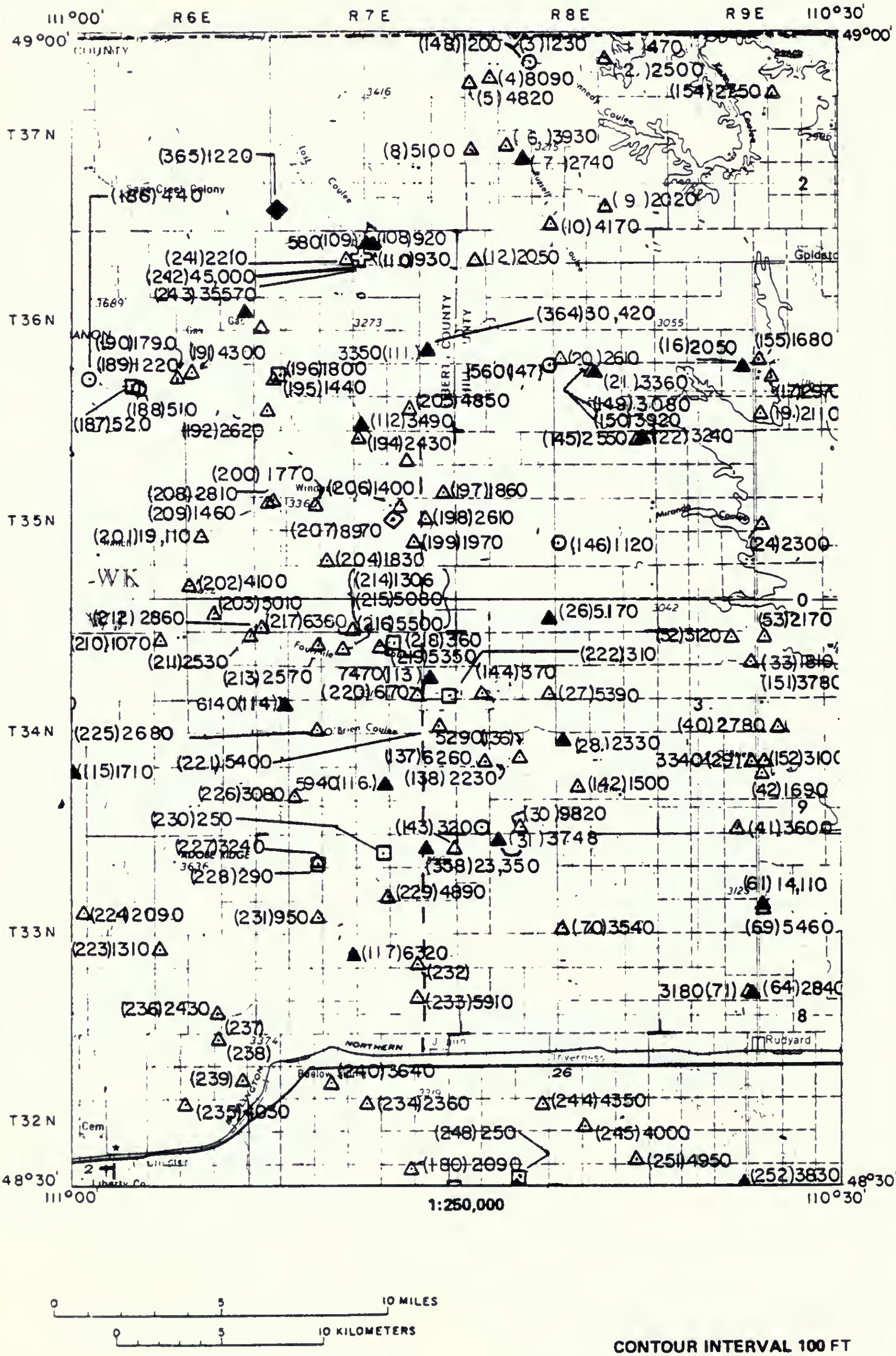
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



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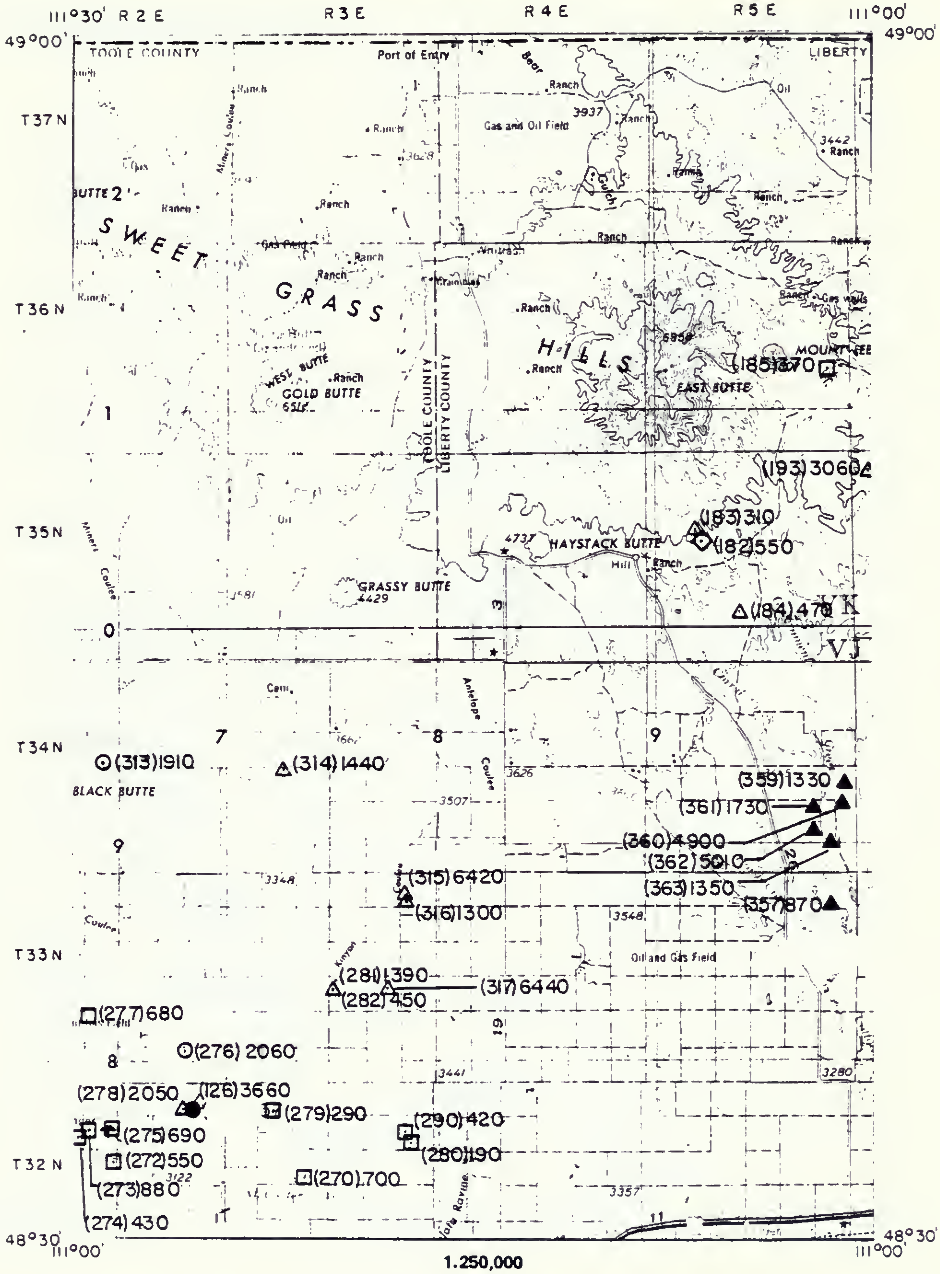

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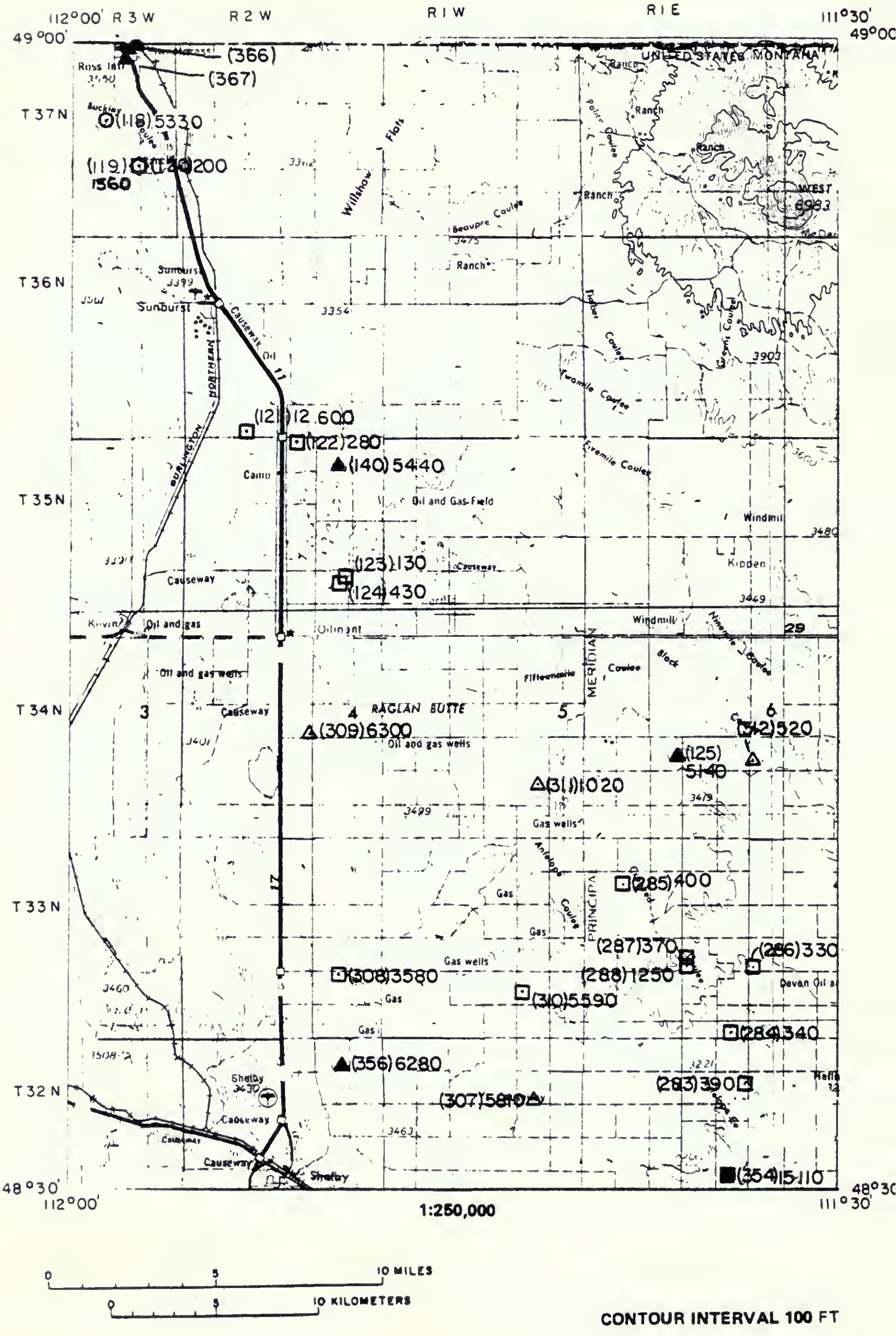

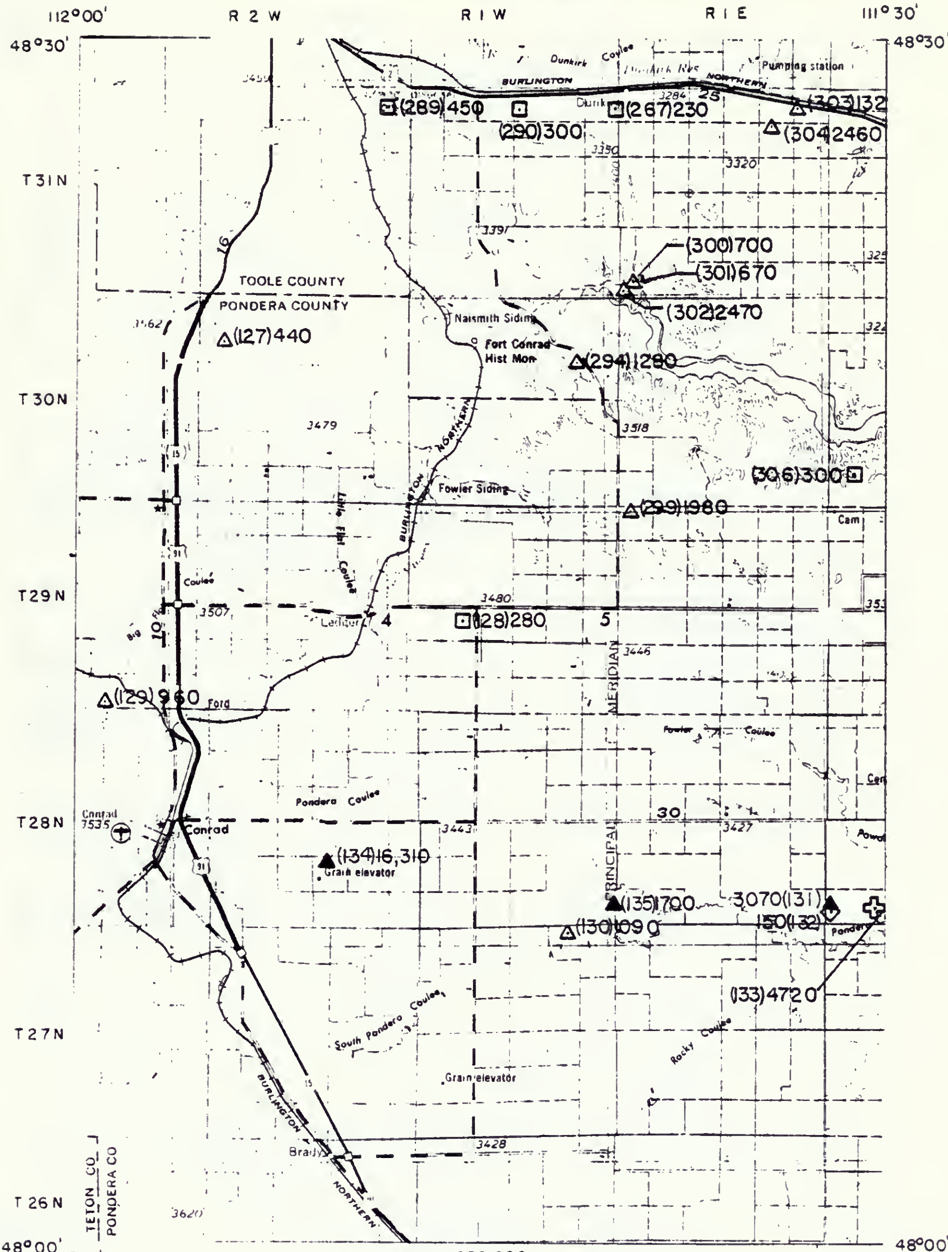

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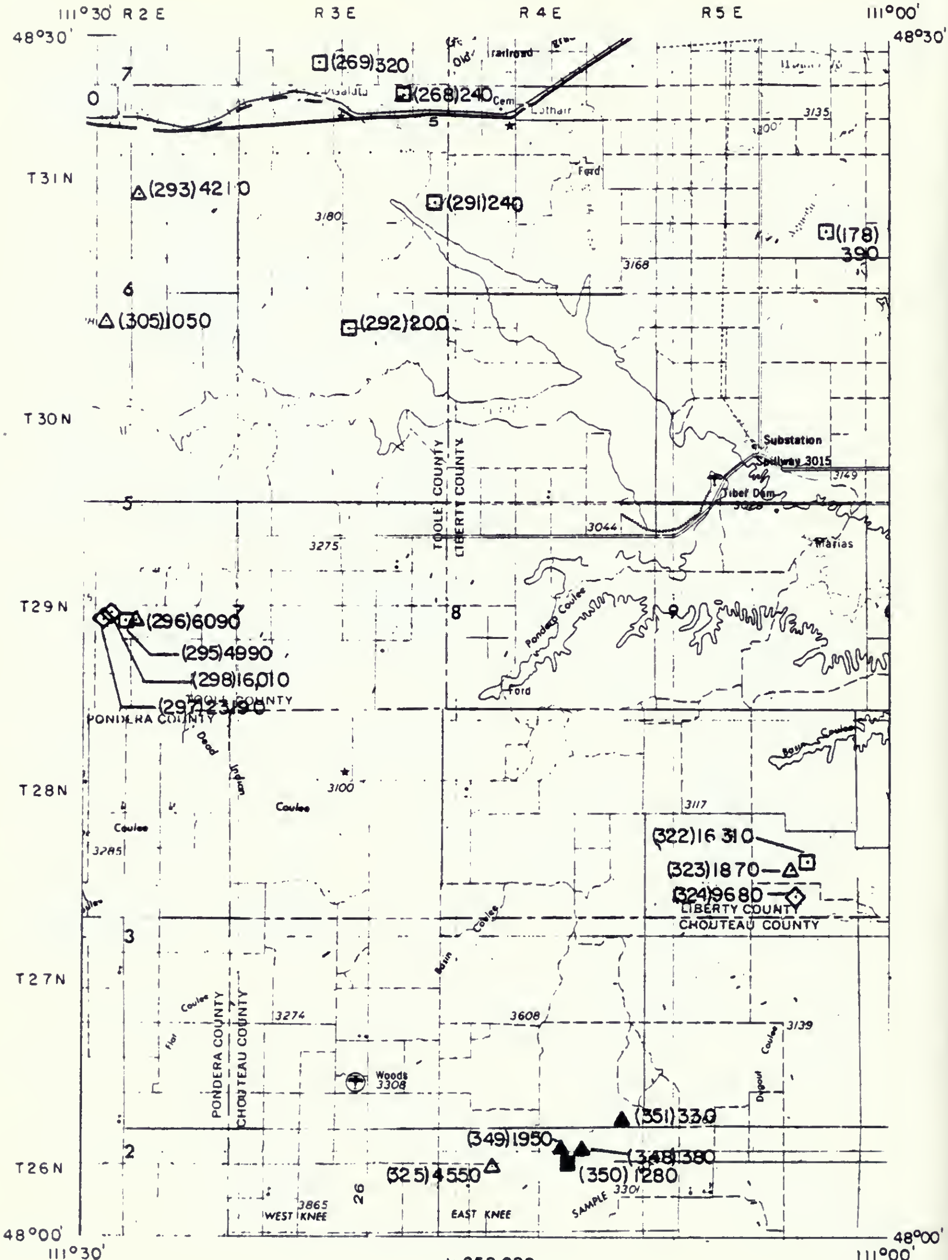
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT



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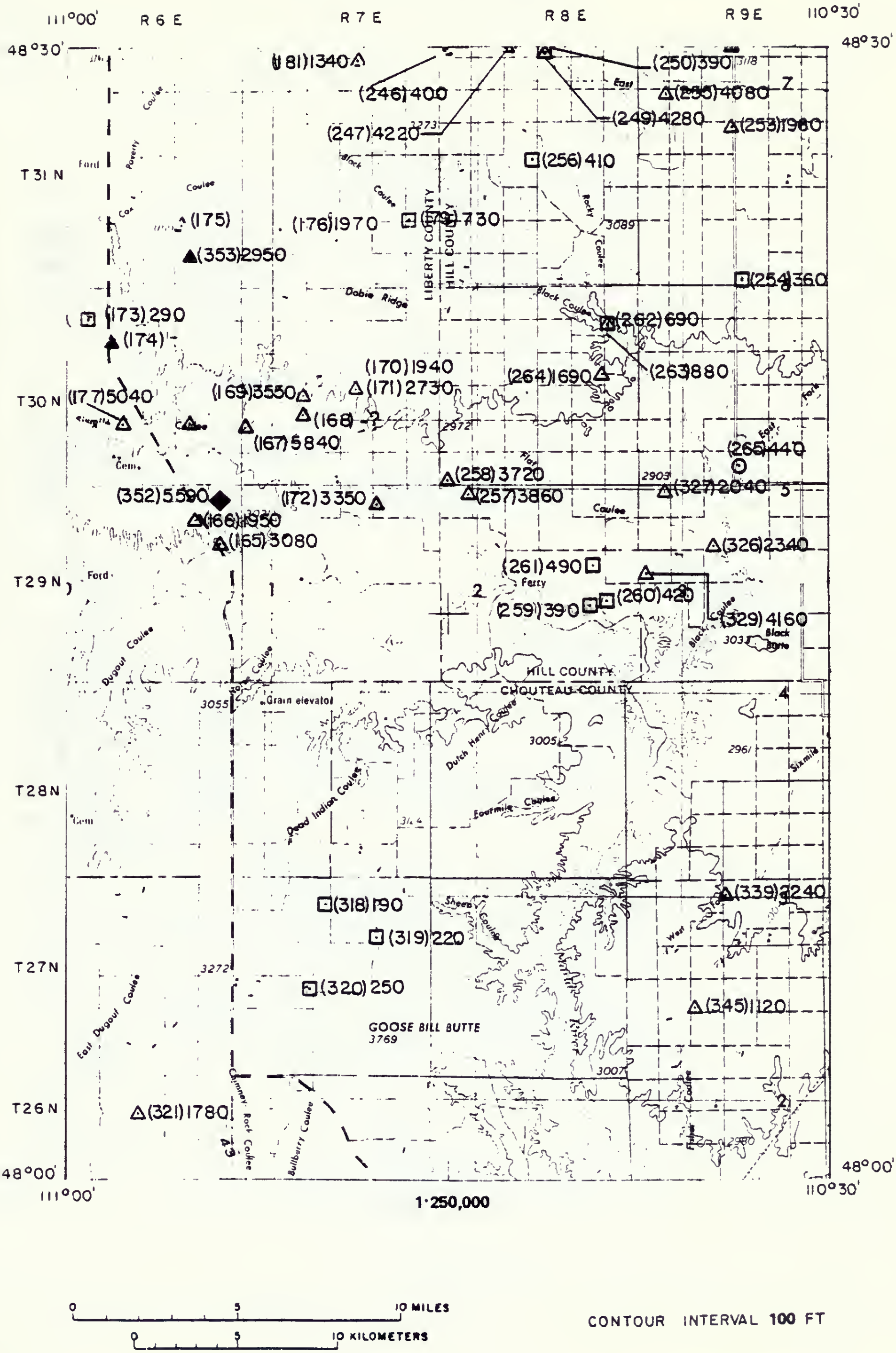
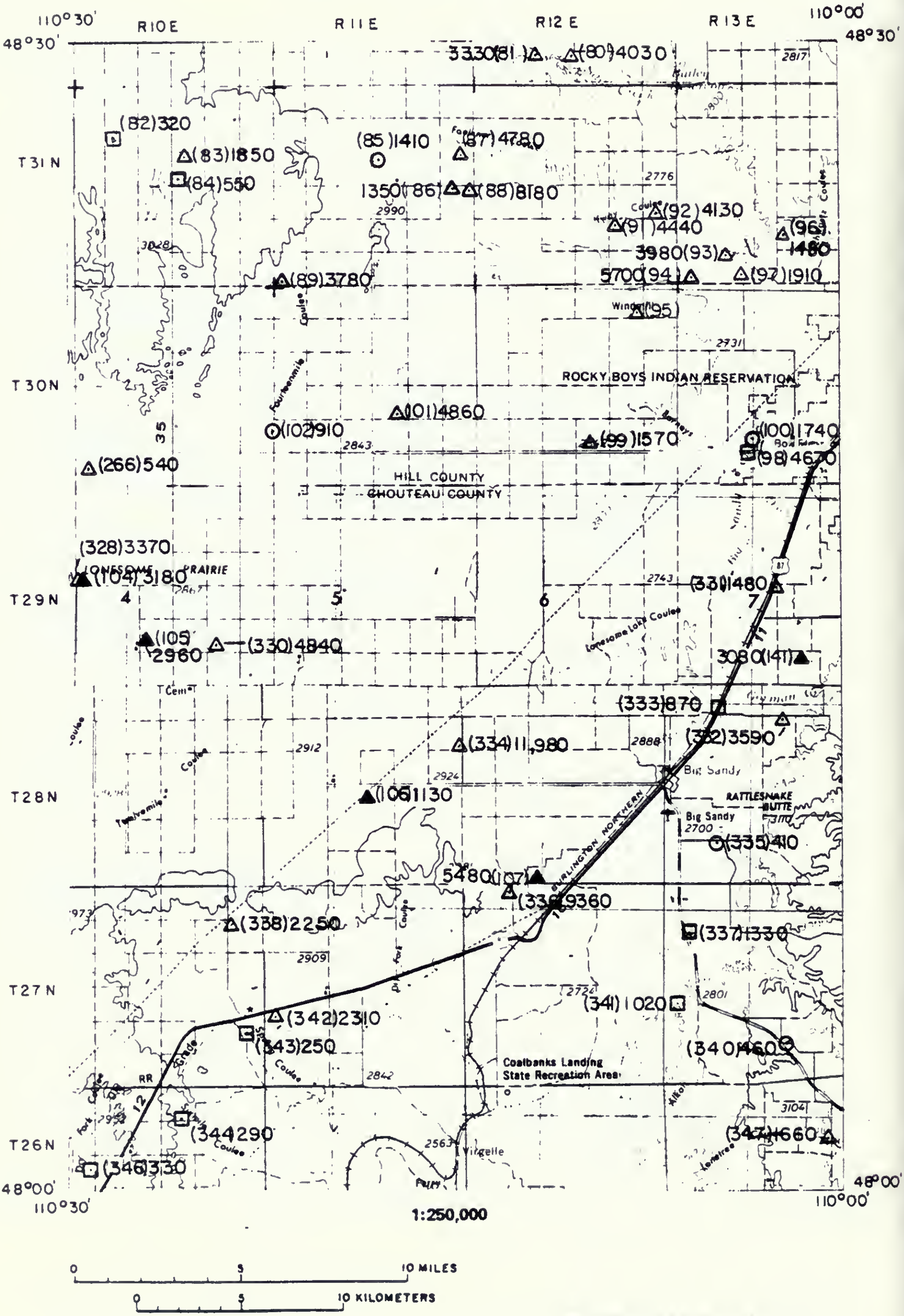
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY





CONTOUR INTERVAL 100 FT

SHELBY 1°x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	MBMG1	Hill	37N 08E 02 C	08 04 75	Well		Domestic use	470	13.9	no	3100		20		Ramberg
2	MBMG2	Hill	37N 08E 02 C	08 04 75	Well		Domestic use	2500	12.8	no	3100				Ramberg
3	MBMG3	Hill	37N 08E 05 DDD	08 04 75	Creek		Kennedy Coulee	1230	20.7	no	3060				
4	MBMG4	Hill	37N 08E 07 ADBA	08 04 75	Well		Water has unpleasant odor and is discolored	8090	11.8	no	3240		230		Temple, J.
5	MBMG5	Hill	37N 08E 07 CBBC	08 04 75	Well		Water is not used for drinking	4820	14.2	no	3260		100		Mansfield, E.
6	MBMG7	Hill	37N 08E 20 BCCC	08 04 75	Well		Domestic use	3930	13	no	3240		226		Rudolph
7	MBMG8	Hill	37N 08E 20 DDDC	01 13 77	Well		Domestic use	2740	10	yes	3190	180	280	211JDRV	Wolery
8	MBMG6	Hill	37N 08E 19 CBCB	08 04 75	Well		Water is not used for drinking	5100	14.8	no	3300		275		Wolery, D
9	MBMG10	Hill	37N 08E 35 BCDB	08 04 75	Well		Domestic use, water is discolored	2020	16.8	no	3130				Senvik
10	MBMG9	Hill	37N 08E 33 DCCD	08 04 75	Well			4170	14.2	no	3100				Seusar
11	MBMG11	Hill	37N 10E 09	08 06 75	River		Milk River	2530	19.5	no	2680				Aageson, A
12	MBMG14	Hill	36N 08E 06 DCCD	08 04 75	Well			2050	15.7	no	3130				Wolery, L
13	MBMG20	Hill	36N 10E 06 DDCC	01 12 77	Well		Domestic use	3440	9	yes	2990	60	120	112DRFT	Patrick, Clifford
14	MBMG22	Hill	36N 10E 21 BD	08 06 75	Well		Domestic use	450	10.8	no	2970		20		Patrick, Lloyd
15	MBMG21	Hill	36N 10E 21 BDBA	01 12 77	Well		Water is not used for drinking	5170	13	yes	2970	80	160	211JDRV	Patrick, Lloyd
16	MBMG18	Hill	36N 09E 28 ABAB	01 12 77	Well	22 gpm (E)	Domestic use	2050	8	yes	3040	106	270	211JDRV	Solum, D
17	MBMG17	Hill	36N 09E 27 BDDC	08 05 75	Well		Water is not used for drinking	2970	15	no	3000		200		Wolery
18	MBMG23	Hill	36N 10E 32 DAAA	01 12 77	Well			2250	12	yes	2960		240	211JDRV	Chvilicek, L.
19	MBMG19	Hill	36N 09E 34 CBCB	08 05 75	Well		Water is not used for drinking	2110	16	no	2980		100		Fields
20	MBMG15	Hill	36N 08E 22 CCCA	08 03 75	Well		Water is not used for drinking	2610	13.1	no	3020		170		Lineweaver
21	MBMG16	Hill	36N 08E 26 BBBC	01 13 77	Well	1 gpm (E)		3360	11	yes	3070	80	200	211JDRV	Bangs
22	MBMG24	Hill	35N 08E 01 ABBB	01 13 77	Well		Water is not used for drinking	3240	4	yes	3050		200	211JDRV	Packer, B.
23	MBMG27	Hill	35N 10E 04 CBC	01 12 77	Well	8 gpm(M)	Domestic use	3590	11	yes	2910	50	226	211JDRV	Chvilicek
24	MBMG26	Hill	35N 09E 15 CCBB	08 05 75	Well		Domestic use	2300	13	no	2960		116		Tolefson
25	MBMG12	Hill	35N 10E 17 DDAC	08 06 76	Well		Domestic use	1870	10.5	no	2940		200		Lincoln
26	MBMG25	Hill	35N 08E 33 DAAA	01 13 77	Well		Water is not used for drinking	5170	9	yes	3160	80	166	211JDRV	Peterson, Ralph
27	MBMG28	Hill	34N 08E 09 DDDD	08 04 75	Well			5390	11.8	no	3180		124		McFadden
28	MBMG33	Hill	34N 08E 23 BBCD	01 13 77	Well		Water is not used for drinking	2330	18	yes	3120		20	112DRFT	Cady, Lonnie
29	MBMG32	Hill	34N 09E 21 DDDA	08 05 75	Well		Water is not used for drinking	3340	18.5	no	3150		165		Anderson, R.
30	MBMG34	Hill	34N 08E 32 DDDD	08 03 75	Well			9820	13	no	3220				Hall

SHELBY 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	MBMG106	Hill	33N 08E 05 BBAA	01 13 77	Well		Domestic use	3748	9	yes	3250	80	230	211JDRV	Bakke
32	MBMG35	Hill	34N 09E 04 BBBB	08 04 75	Well		Domestic use	3120	16.9	no	3010		90		DeMartian
33	MBMG36	Hill	34N 09E 04 DDBB	08 05 75	Well		Water is not used for drinking	1810	17.5	no	3040				VanWechel
34	MBMG69	Hill	34N 12E 19 BOBD	01 11 77	Well		Domestic use	2690	9	yes	2760	20	75	211JDRV	Pollington
35	MBMG40	Hill	34N 10E 07 ADDA	08 06 75	Well		Water is not used for drinking	1580	15.8	no	2990		20		Michaelson
36	MBMG70	Hill	34N 12E 19 BCBA	04 11 76	Well		Domestic use	260	8.8	no	2760				
37	76M1584	Hill	34N 10E 14 BCAB	01 12 77	Well			2710	9	yes	2860	6	68	112DRFT	Stephenson
38	MBMG41	Hill	34N 10E 14 BCAA	08 08 75	Well			4880	17.5	no	2880				Stephenson
39	MBMG42	Hill	34N 10E 14 BCAA	01 12 77	Well		Domestic use	2230	9	yes	2880	14	17	112DRFT	Stephenson
40	MBMG37	Hill	34N 09E 15 CCC	08 05 77	Well		Domestic use	2780	12.9	no	3040				Trecht
41	MBMG38	Hill	34N 09E 33 CDCD	08 04 75	Well		Water is not used for drinking	3600		no	3030	3	100		Huntley
42	MBMG39	Hill	34N 09E 27 BBAB	08 05 75	Well		Water has an unpleasant odor	1690	14.1	no	3030	3	190		Anderson
43	MBMG54	Hill	35N 11E 31 DCCB	04 13 78	Well		Domestic use except for drinking	3620	13.9	no	2940		195		Welsh
44	MBMG56	Hill	35N 11E 31 DCCC	01 12 77	Well		Stock use	4540	18	yes	2950	137	205	211JDRV	Welsh
45	MBMG68	Hill	34N 11E 24 CDDD	01 11 77	Well		Domestic use except for drinking	5739	9	yes	2800			211JDRV	Good, Roy
46	MBMG73	Hill	34N 12E 05 DDDD	04 14 76	Reservoir			170	11.1	no	2730				
47	MBMG72	Hill	34N 12E 04 CACC	04 14 78	Creek		Archie Coulee	260	15.6	no	2700				
48	MBMG74	Hill	34N 12E 16 DADA	04 14 76	Reservoir			140	14.9	no	2730				
49	MBMG75	Hill	34N 12E 15 ADDA	04 14 76	Reservoir		Stock reservoir	260	16	no	2700				Woeppel
50	MBMG76	Hill	34N 12E 23 DDCC	04 14 78	Well			700	10.2	no	2680				
51	MBMG77	Hill	34N 12E 23 DDCB	04 14 76	Reservoir			130	13.6	no	2680				
52	MBMG80	Hill	34N 13E 20 CDCA	04 14 78	Well		Domestic use except for drinking	4040	6.5	no	2600				
53	MBMG78	Hill	34N 12E 25 ABBA	04 14 76	Reservoir		Chain of Lakes	130	14.4	no	2550				
54	MBMG79	Hill	34N 12E 36 DADB	04 14 76	Reservoir		Reservoir in Dry Lake Coulee	160	13.9	no	2630				
55	MBMG81	Hill	34N 13E 27 ABC	04 14 78	Well		Stock use, water is corrosive	10020	8.9	no	2700		265		Donoven
56	MBMG82	Hill	33N 12E 04 ADDD	04 14 76	Well		Domestic use except for drinking, water is corrosive	6040	16.5	no	2750				Donoven
57	MBMG131	Hill	33N 13E 24 DDAC	04 12 78	Reservoir		Stock use	4510	20	no	2760				Knule
58	MBMG133	Hill	33N 13E 27 BBAB	04 12 76	Well		Unused	4780	11	no	2720		210		Vogel, Raymond
59	MBMG132	Hill	33N 13E 33 BBCA	04 12 76	Well		Domestic use	570	28	no	2900				
60	MBMG110	Hill	33N 10E 07 D	01 13 77	Well		Domestic use	4930	6	yes	3060		1077	211EGLE	Pester

SHELBY 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection data Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
61	MBMG108	Hill	33N 09E 15 BBCC	01 12 17	Well		Water is not used for drinking	14110	9	yes	3090	20	183	211JDRV	
62	MBMG111	Hill	33N 10E 16 DCCD	04 15 76	Well					no	3060				Smiz, Jim
63	MBMG113	Hill	33N 10E 36 DDAB	04 14 76	Seep			600	13	no	2880				
64	MBMG109	Hill	33N 09E 28 DDA	01 12 77	Well		Domestic and stock use	2840	10	yes	2840	18	90	112DRFT	Domire
65	MBMG112	Hill	33N 11E 31 CDDC	04 14 76	Seep			15790	20	no	2850				
66	MBMG114	Hill	33N 11E 31 DCDB	04 14 78	Reservoir					no	2840				
67	MBMG117	Hill	32N 11E 06 BABD	04 14 78	Spring	1 gpm	Marshy area around spring	2740	23	no	2840				
68	MBMG115	Hill	32N 10E 03 BADA	04 14 78	Well	1 gpm	Unused	2320	9	no	3040		30		Spicher, Bill
69	MBMG108	Hill	33N 09E 15 BBC	08 04 75	Well		Water is not used for drinking	5460	12	no	3090		185		Voss
70	MBMG107	Hill	33N 08E 15 CCAC	08 03 75	Well		Unused	3540	10.6	no	3250		209		Zentais
71	MBMG109	Hill	33N 09E 28 DDA	08 04 76	Well		Domestic use	3190	13.8	no	3100		90		Domire
72	MBMG113	Hill	32N 11E 15 CBCB	04 14 76	Creek			6060	12	no	2810				
73	MBMG119	Hill	32N 11E 16 DADA	04 14 76	Reservoir		Reservoir on tributary to Sage Creek	8720	12	no	2820				
74	MBMG135	Hill	32N 12E 18 CAAB	04 13 76	Creek			2530	15.5	no	2740				
75	MBMG142	Hill	32N 13E 18 CDCC	04 12 76	Reservoir		Stock reservoir	870	12	no	2840				
76	MBMG140	Hill	32N 13E 17 CBAC	04 12 76	Well		Domestic use	4740	11	no	2880		130		Rolston, W.
77	MBMG141	Hill	32N 13E 17 CBAB	04 12 78	Reservoir		Used for irrigation	1060	17	no	2880				Rolston, W.
78	MBMG136	Hill	32N 12E 22 BABB		Well			1540		no	2920		206		Johnson, Kate
79	MBMG137	Hill	32N 12E 22 BABC		Well			6160		no	2920				Johnson, Kate
80	MBMG139	Hill	32N 12E 23 AAAA		Well			4030		no	2750		128		
81	MBMG138	Hill	32N 12E 32 AAAA		Well			3330		no	2780	flowing	173		
82	MBMG121	Hill	31N 10E 08 CBDA	04 14 76	Reservoir		Reservoir on East Fork Black Coulee	320	13.5	no	3020				
83	MBMG122	Hill	31N 10E 15 BACD	04 14 76	Well		Domestic use	1860	13	no	3050		15		Alex, John
84	MBMG123	Hill	31N 10E 15 CCCC	04 14 76	Pond		Stagnant water in a ditch	550	11.1	no	3040				
85	MBMG120	Hill	31N 11E 15 BBBC	04 14 78	Creek			1410	10	no	2870				
86	MBMG126	Hill	31N 11E 24 BABD	04 13 76	Well		Stock use	1350	6.1	no	2850		30		Curty, Lee
87	MBMG124	Hill	31N 11E 13 ABAA	04 13 78	Well		Stock use	4780	9.1	no	2850				Curty, Lee
88	MBMG125	Hill	31N 11E 24 AACD	04 13 78	Well	8 gpm	Domestic use except for drinking	8180	11.5	no	2850		30		Curty, Lee
89	MBMG124	Hill	31N 11E 31 CCCC	04 14 75	Well		Domestic use except for drinking	3780	18.3	no	2950	135			Dolph, Dan L.
90	not on map														

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91	MBMG158	Hill	31N 12E 28 BBCD	04 13 78	Well	6 gpm	Domestic use except for drinking	4440	10.8	no	2780		160		Carpenter, Earl
92	MBMG157	Hill	31N 12E 24 CDDB	04 12 76	Well		Domestic use	4130	10	no			200		Ruem, Chris
93	MBMG160	Hill	31N 13E 32 BAAA	04 12 76	Well	7 gpm	Stock use	3980	10	no	2660		182		Michels, Harold
94	MBMG	Hill	31N 13E 31 CDDD	04 12 76	Well		Domestic use except for drinking	5700	12	no	2770	137	246	211CLGT	Goodian
95	MBMG167	Hill	30N 12E 02 DDDC	04 13 76	Well					no	2830				
96	MBMG159	Hill	31N 13E 27 BCCB	04 12 78	Well		Domestic use	1480	12	no		10	20		Steward, Jim
97	MBMG181	Hill	31N 13E 32 DDAA	04 12 76	Well			1810	7	no	2710	22	< 50		Michels, H
98	MBMG169	Hill	30N 13E 33 BBBC		Reservoir		Reservoir is surrounded by salts	4870		no	2630				
99	MBMG168	Hill	30N 12E 27 CDD	04 13 76	Well		Domestic use	1570	17	no	2840		30		Bitz
100	MBMG171	Hill	30N 13E 28 CCCD	04 12 78	Pond			1740	13	no	2630				
101	MBMG130	Hill	30N 11E 22 DCCC	04 14 78	Well			4860	7	no	2840				Cowen
102	MBMG129	Hill	30N 10E 25 ADAD	04 14 76	Creek		Fourteen Mile Coulee	910	12.5	no	2840	34			Cowen
103	not on map														
104	76M1607	Chouteau	29N 10E 18 CCDB	01 14 77	Well			3180	10	yes	2880	225	436	211EGLE	Bold
105	76M1606	Chouteau	29N 10E 28 CBBD	01 14 77	Well			2960	12	yes	2880		340	211EGLE	Kulbeck
106	76M1605	Chouteau	28N 11E 22 BCAD	01 14 77	Well			1130	14	yes	2940		32	112DRFT	Haakensen
107	76M1608	Chouteau	28N 12E 33 CCCC	01 14 77	Well	6 gpm	Stock use	6480	14	yes	2760	100	500	211EGLE	Farley
108	76M0240	Liberty	36N 07E 03 BDAB	04 12 78	Well		Van Dessel Test Area	920	7.1	yes	3130	7	60	112GCDF	Van Dessell
109	76M0242	Liberty	36N 07E 03 BCDD	04 12 76	Well		Van Dessel Test Area	580	12	yes	3180	24	60	112GCDF	Van Dessell
110	76M0241	Liberty	36N 07E 03 BDAD	04 12 76	Well		Van Dessel Test Area	930	8.1	yes	3130	5	35	112GCDF	Van Dessell
111	76M1461	Liberty	36N 07E 24 CBCA	12 04 76	Well		Domestic use	3350	13.3	yes		6	12	112GCDF	Robo, Gustav
112	76M1464	Liberty	36N 07E 34 CCCD	12 04 78	Well		Domestic use	3490	6	yes			125	211JDRV	Hodges
113	76M1466	Liberty	34N 07E 12 BCCC	12 05 78	Well	7 gpm	Water is not used for drinking	7470	14	yes	3240	20	80	211JDRV	Rudolph
114	76M1465	Liberty	34N 07E 18 AABA	12 04 78	Well	18 gpm (M)		6140	9.2	yes	3380	70	120	211JDRV	Graff
115	76M0243	Liberty	34N 06E 30 BABB	04 12 76	Well		Skari Test Area No S-12, SK2-74	1710	8.6	yes	3330	27	64	112GCDF	Skari
116	76M1467	Liberty	34N 07E 27 DAAB	12 06 76			Water is not used for drinking	5940	25	yes	3300	80	100	211JDRV	Cady
117	76M1468	Liberty	33N 07E 21 DADC	12 05 76	Well		Domestic use except for drinking & cooking	6320	16	yes	3360	180	280	211JDRV	Pimley, Don
118	MBMG10	Toole	37N 03W 16 ADDB	12 30 76	Creek			6330	1.5	no	3400				
119	MBMG13	Toole	37N 03W 23 DDB	12 30 75	Spring	1 gpm (E)	Stock use only	1560	2.6	no	3400				McAlpine, C.
120	MBMG12	Toole	37N 03W 23 DDDA	12 30 76	Reservoir		Reservoir frozen over	200	0	no	3360				McAlpine, C.

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121	MBMG15	Toole	36N 02W 32 DDD	12 30 75	Reservoir		Reservoir frozen over	12600	0	no	3420				
122	MBMG14	Toole	35N 02W 03 BAAC	12 30 75	Reservoir		Reservoir frozen over	280	2	no	3480				Feugue
123	MBMG17	Toole	35N 02W 26 AAA	12 30 75	Reservoir		Reservoir frozen over	130	0.3	no	3480				Byrne, W
124	MBMG18	Toole	35N 02W 26 ACC	12 30 75	Reservoir		Reservoir frozen over	430	0.8	no	3450				Dahl, Bill
125	76M1459	Toole	34N 01E 21 DAAA	12 03 76	Well		Domestic use	5140	7.7	yes	3440				Johannsen
126	76M1460	Toole	32N 02E 01 CCCC	12 03 76	Creek		Willow Creek	3660	1.3	yes	3200			211CLRD	
127	MBMG40	Pondera	30N 02W 07 ACD	08 29 76	Reservoir			440		no	3490				
128	MBMG41	Pondera	29N 01W 20 ACA	08 28 78	Reservoir			280		no	3400				Jones, Tom
129	MBMG46	Pondera	29N 03E 34 CDCA	08 28 78	Well		Domestic use	960		no	3510		60		Finlayson
130	MBMG42	Pondera	27N 01W 02 BAAA	08 29 78	Well		Domestic use	1090		no	3300				
131	MBMG43	Pondera	28N 02E 31 BCCC	12 07 76	Well		Domestic use	3070	21	yes	3310		36		Matheson
132	MBMG44	Pondera	28N 02E 31 CBBA	08 29 76	Spring			150		no	3310				Matheson
133	MBMG45	Pondera	28N 02E 32 CADA	08 29 76	Seep			4720		no	3320				Matheson
134	76M0247	Pondera	28N 02W 27 BADA	04 14 76	Well		Anderson test area	16310	7	yes	3620	11	34	112DRFT	Anderson
135	76M0248	Pondera	28N 01W 36 ADBC	04 14 76	Well		Meuli test area	1700	8	yes		14		112GCLO	Meuli
136	MBMG29	Hill	34N 08E 20 CCCB	08 03 75	Well			5290	10	no	3170	flowing	85		Gutcher
137	MBMG30	Hill	34N 08E 19 DDDA	08 03 75	Well			6260	13	no	3170				Gutcher
138	MBMG31	Hill	34N 08E 19 DDAD	08 03 76	Well			2230	12.5	no	3170	8	16		Gutcher
139	MBMG71	Hill	34N 12E 20 CCCA	04 14 76	Well		Domestic use	1000		no	2740				Good
140	MBMG43	Toole	35N 02W 02 DCCA	04 13 76	Well		Saline seep test well	5440	11	yes	3430	11	27	112DRFT	Flesch
141	76M1604	Chouteau	29N 13E 34 ABCB	01 14 77	Well		Domestic'	3080	18	yes	2690	20	237	112DRFT	Clawiter
142	MBMG142	Hill	34N 08E 27 DBAB	07 30 75	Well		Domestic	1500	11.6	no	3160				Barbie
143	MBMG143	Hill	34N 08E 31 DCDC	07 30 75	Creek		D'Brian Creek	320	23	no	3260				
144	MBMG144	Hill	34N 08E 07 DDD	07 30 75	Well			370	13.5	no	3200				McCann
145	MBMG145	Hill	35N 08E 01 ABBB	07 30 75	Well		Water is not used for drinking	2550	12	no	3060		200		Packer, B.
146	MBMG146	Hill	36N 08E 22 BCBB	07 30 75	Creek		Little Sage Creek	1120	19.5	no	3070				
147	MBMG147	Hill	36N 08E 28 AAAA	07 30 75	Creek	14 cfs	Big Sage Creek	1560	23.1	no	3020				
148	MBMG148	Hill	37N 08E 05 DDDA	08 04 76	Creek		Kennedy Coulee	1200	20.7	no	3060				
149	MBMG149	Hill	36N 08E 26 BBBB	08 04 75	Well		Domestic use	3080	11.2	no	3080				Fink
150	MBMG150	Hill	36N 08E 26 BBBB	08 04 75	Well		Domestic use	3920	10.2	no	3080				Fink

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151	MBMG151	Hill	34N 09E 04 DDDB	08 04 75	Well		Water is not used for drinking	3780	17	no	3040		31		Bradbury
152	MBMG152	Hill	34N 09E 22 CCCD	08 05 75	Well		Domestic use	3100	13.8	no	3040				Stark, D.
153	MBMG153	Hill	34N 09E 03 BBBB	08 05 75	Well		Domestic use	2170	16	no	3020				VanWechel
154	MBMG154	Hill	37N 09E 10 CCC	08 05 75	Well		Domestic use except for drinking	2750	17	no	2990				Berge, S.
155	MBMG155	Hill	36N 09E 23 CCCA	08 05 75	Well		Domestic and stock use	1680	24	no	2960		1014		Langel, A. C
158	MBMG156	Hill	32N 10E 04 BADA	08 06 75	Well		Domestic use	2460	16.7	no	3060				Spicher
157	MBMG157	Hill	33N 10E 08 DDDD	08 06 75	Well		Domestic use except for drinking	2710	15.7	no	3060		285		Spinler
158	MBMG158	Hill	33N 10E 07 DDDC	08 06 75	Well			3980	32	no	3070		1064		Pester
159	MBMG159	Hill	33N 10E 06 CCCC	08 06 75	Well		Domestic use	730	15.3	no	3040				Sterry
160	MBMG160	Hill	34N 10E 32 CDCC	08 06 75	Well		Domestic use	1970	14.7	no	3000		150		Spinler
161	MBMG161	Hill	34N 10E 29 DDAB	08 06 75	Well		Domestic use	1530	14.8	no	3060		180		Chinadale
162	MBMG162	Hill	34N 10E 22 CDCC	08 06 75	Well		Domestic use	810	12.2	no	2940		26		Farnick
163	MBMG163	Hill	35N 10E 06 CAA	08 06 75	Well		Domestic use	1500	16	no	2960				Jackson
164	MBMG164	Hill	37N 10E 32 A	08 06 75	Well		Domestic use	4910	14.5	no					Greytak
166	MBMG165	Liberty	29N 06E 12 CDBA	07 24 75	Reservoir			3080	26	no	2980				Good, Phyllis
166	MBMG166	Liberty	29N 06E 11 ABBB	07 24 75	Reservoir			1950	21.8	no	3060				Schumacker
167	MBMG167	Liberty	30N 07E 30 BCBB	07 24 75	Well		Stock use	5840	11	no	2980	25	225		Brain
168	MBMG168	Liberty	30N 07E 20 DDAA	07 24 75	Well		Domestic and stock use			no	2960		180		Henke
169	MBMG169	Liberty	30N 07E 20 ADAB	07 24 75	Well		Domestic and stock use	3650	12	no	2980		230		Petek
170	MBMG170	Liberty	30N 07E 22 BAAD	07 24 75	Well		Domestic and stock use	1940	12	no	2990		285		Bubnash
171	MBMG171	Liberty	30N 07E 22 BAAC	07 24 75	Reservoir			2730	26	no					Bubnash
172	MBMG172	Liberty	29N 07E 02 CBBD	07 24 75	Well			3350	12	no	2820	80	168		Nehrgang
173	MBMG173	Liberty	30N 06E 05 CDDC	07 25 75	Reservoir		Located in Twelve Mile Coulee	290	22	no	2990				Gagnon, N.
174	MBMG174	Liberty	30N 06E 09 CBBC	07 25 75	Well					no	3020				Gagnon, Francis
175	MBMG175	Liberty	31N 06E 26 BBAA	07 25 75	Well		Unused						365		Englund
176	MBMG176	Liberty	31N 07E 29 BBAD	07 25 75	Well			1970	10.2	no	3160	50	260		Seidlitz
177	MBMG177	Liberty	30N 06E 28 BABB	07 25 75	Well			5040	13	no	3160		160		Wolfe
178	MBMG178	Liberty	31N 06E 28 ADCA	07 25 75	Reservoir			390	25.5						Hendrickson
179	MBMG179	Liberty	31N 07E 24 CCCC	07 26 75	Pond		Located in Black Coulee	730	23	no	3100				Dahinden, M
180	MBMG180	Liberty	32N 07E 28 AABA	07 25 75	Well			2080	13	no		155	195		Dahinden

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181	MBMG181	Liberty	32N 07E 34 ABBB	07 25 75	Well			1340	12	no			195		Seidlitz
182	MBMG182	Liberty	35N 05E 17 DBBB	07 26 75	Spring			560	8	no	4030				Jeppesen, H.
183	MBMG183	Liberty	35N 05E 17 BADB	07 28 75	Reservoir			310	21	no	4120				Jeppesen, H.
184	MBMG184	Liberty	35N 05E 28 DBCC	07 26 75	Reservoir			470	18.5	no	3680				Jeppesen, H.
185	MBMG185	Liberty	36N 05E 24 CAAB	07 26 75	Marsh			370	20	no	4000				Anderson, Enoch
186	MBMG186	Liberty	36N 06E 29 CBBA	07 28 75	Creek			440	14	no	3750				Cicon, James
187	MBMG187	Liberty	36N 06E 28 CADA	07 26 75	Reservoir			620	22	no	3620				Murray, Al
188	MBMG188	Liberty	36N 06E 28 CADA	07 28 75	Creek			610	17	no	3620				
189	MBMG189	Liberty	36N 06E 27 ADCA	07 26 75	Well			1220	16	no	3480				Cicon, J.
190	MBMG190	Liberty	36N 06E 27 ADCA	07 28 75				1780	14	no	3480		60		Cicon
191	MBMG191	Liberty	36N 06E 26 BBBA	07 26 75	Well	3 gpm		4300	18.5	no	3480	20	152		Olsen, J.
192	MBMG192	Liberty	36N 07E 31 BDAC	07 26 75	Well			2620	16	no	3410		206		Temple, Ed
193	MBMG193	Liberty	35N 06E 06 BDDD	07 26 75	Well			3060	15.5	no	3360		120		Temple, Ted
194	MBMG194	Liberty	36N 07E 03 BBCB	07 26 75	Well			2430	19.3	no			180		Kidd
195	MBMG195	Liberty	36N 07E 30 ACAD	07 26 75	Well			1440	16.6	no	3400		820		Temple, Ernest
196	MBMG196	Liberty	36N 07E 30 ADBD	07 26 75	Reservoir			1800	24	no	3370				Temple, Ernest
197	MBMG197	Liberty	35N 07E 12 DCBB	07 27 75	Well	40 gpm (M)		1860	12	no	3260	20	147		Hodges, Dean
198	MBMG198	Liberty	35N 07E 13 CBBA	07 27 75	Well			2610	18	no	3260	12	31		Gifford, A.
199	MBMG199	Liberty	35N 07E 23 AACC	07 27 75	Well			1970	15.5	no	3240				Wood, Thomas
200	MBMG200	Liberty	36N 07E 17 AAAB	07 27 75	Well			1770	12	no	3320	80	120		Laird, Robert
201	MBMG201	Liberty	35N 06E 23 BABB	07 27 75	Well			19110	15.5	no	3480	75	80		Gunderson, Ed
202	MBMG202	Liberty	35N 06E 26 CBCC	07 27 75	Well			4100	17	no	3480				Schaefer, D.
203	MBMG203	Liberty	35N 06E 35 ADAB	07 27 75	Well			6010	14	no	3420	60	84		Jensen
204	MBMG204	Liberty	35N 07E 21 CCDD	07 27 75	Well		Stock use	1830	19.5	no	3230	30	119		Joy, F.
205	MBMG205	Liberty	36N 07E 35 ACCC	07 28 75	Well			4860	10.8	no	3300				Robo
206	MBMG206	Liberty	35N 07E 14 BAAA	07 28 75	Well		Domestic use except for drinking	1400	11	no	3270	30			Richter
207	MBMG207	Liberty	36N 07E 14 CBBD	07 28 75	Spring			8970	21	no	3240				
208	MBMG208	Liberty	35N 07E 18 ABBD	07 28 75	Well		Domestic use except for drinking	2810	14	no	3380	35	145		McDowell, J.
209	MBMG209	Liberty	35N 07E 18 BAAA	07 28 75	Well			1460	6.8	no	3370	8	15		McDowell, J.
210	MBMG210	Liberty	34N 06E 03 BBAD	07 28 75	Well			1070	7	no	3460	13	28		Mattson, A.

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211	MBMG211	Liberty	34N 06E 01 AAAB	07 28 75	Well	3 gpm		2530	10.2	no	3400				Smith, C.
212	MBMG212	Liberty	35N 07E 31 CCCB	07 28 75	Well			2860	16	no	3390		50		Mildram, L.
213	MBMG213	Liberty	34N 07E 05 ADAA	07 28 75	Well			2570	15.8	no	3340	15	85		Johnson, V.
214	MBMG214	Liberty	34N 07E 04 ACBC	07 28 75	Well			1360	15.5	no	3320	6	12		Milnar, L.
215	MBMG215	Liberty	34N 07E 04 ACBC	07 28 75	Well			5080	18.4	no	3320	60	70		Milnar, L.
216	MBMG216	Liberty	34N 07E 04 ACBD	07 28 75	Well	4.5 gpm		5500	10	no	3200				Milnar, L.
217	MBMG217	Liberty	35N 07E 33 DDDD	07 28 75	Well			8360	15	no	3320	40	115		Milnar, E.
218	MBMG218	Liberty	34N 07E 02 BCBB	07 28 75	Reservoir			360	25.5	no	3240				Mildrum, F
219	MBMG219	Liberty	34N 07E 03 ADAA	07 28 75	Well	2.5 gpm		5350	10.6	no	3250				Mildrum, F
220	MBMG220	Liberty	34N 07E 11 DDDD	07 28 76	Well			6170	12	no	3240				May
221	MBMG221	Liberty	34N 07E 13 CDDD	07 28 75	Well			5400	15	no	3240	15	112		Kinyon, H.
222	MBMG222	Liberty	34N 07E 12 DDDC	07 28 75	Reservoir			310	28.8	no	3240				Lalum, P.
223	MBMG223	Liberty	33N 06E 22 BCCC	07 28 76	Well	13 gpm		1310	13.8	no	3300	280	570		Green, Charles
224	MBMG224	Liberty	33N 06E 18 ADAC	07 28 75	Well	13 gpm		2090	13.1	no	3320	150	500		Kanfield, D.
225	MBMG225	Liberty	34N 07E 17 DDDB	07 29 76	Well			2680	10	no	3300		110		Heydon, C.
226	MBMG226	Liberty	34N 07E 29 CCDC	07 29 76	Well	8 gpm		3080	10.5	no	3400		110		Sundgram, W
227	MBMG227	Liberty	33N 07E 05 DDAD	07 29 75	Well			3240	15	no	3470		240		Miller
228	MBMG228	Liberty	33N 07E 05 DDDC	07 29 75	Reservoir			290	19.5	no	3470				Miller
229	MBMG229	Liberty	33N 07E 10 DDDB	07 28 75	Well	5 gpm		4890	17	no	3350	180	280		Thielman
230	MBMG230	Liberty	33N 07E 03 DADB	07 28 76	Reservoir			250	23	no	3360				Sundgren, A.
231	MBMG231	Liberty	33N 07E 17 ADDC	07 29 75	Well			950	8.5	no	3420		25		Foster, R.
232	MBMG232	Liberty	33N 07E 23 DDDA	07 29 76	Well					no	3340		285		Lyle, D.
233	MBMG233	Liberty	33N 07E 26 DDDD	07 29 76	Well			6810	10.3	no	3360		28		Anderson, M.
234	MBMG234	Liberty	32N 07E 15 ABBD	07 29 75	Well			2360	11.8	no	3340	200	300		Minnehan, J.
235	MBMG235	Liberty	32N 06E 14 BBBB	07 30 76	Well			4030	11.7	no	3190	90	420		Heimbernar
236	MBMG236	Liberty	33N 06E 35 ADAA	07 30 75	Well			2430	14	no	3300	180	310		Thielman, A.
237	MBMG237	Liberty	32N 06E 01 BBAA	07 30 76	Well		Former domestic well			no	3260	15	23		Shettel, A.
238	MBMG238	Liberty	32N 06E 01 BBAA	07 30 76	Well		Domestic use			no	3260	300	600		Shettel, A.
239	MBMG239	Liberty	32N 05E 12 ADDD	07 30 75	Well					no	3300				Swank, B.
240	MBMG240	Liberty	32N 07E 09	07 30 75	Well			3640	14.9	no			286		Hadford

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241	MBMG241	Liberty	36N 07E 04 DDCA	07 30 75	Well			2210	11.8	no					Van Dassel
242	MBMG242	Liberty	36N 07E 03 BCB	07 30 75	Seep			45000	26	no					Van Dassel
243	MBMG243	Liberty	36N 07E 03 BCA	07 30 75	Seep			35570	23	no					Van Dassel
244	MBMG244	Hill	32N 08E 16 AAAA	01 01 76	Well		Domestic use except for drinking	4350	11.6	no	3300		190		Jochim, A.
245	MBMG245	Hill	32N 08E 14 CCCC	01 01 76	Well		Domestic use except for drinking	4000	12.5	no	3270		160		Rugtredt
246	MBMG246	Hill	32N 08E 30 CBBD	01 01 78	Reservoir		Reservoir frozen over	400	5	no	3300				Teinstrom
247	MBMG247	Hill	32N 08E 28 CBAC	01 01 76	Well		Domestic use	4220	2	no	3240		160		Meyer, R.
248	MBMG248	Hill	32N 08E 28 BCCD	01 01 76	Reservoir		Reservoir frozen over	250	3.5	no	3240				Meyer, R.
249	MBMG249	Hill	32N 08E 27 CCBC	01 01 76	Well		Domestic use except for cooking and drinking	4280	8.5	no	3200		142		Jochim, M.
250	MBMG250	Hill	32N 08E 27 CCBA	01 01 76	Reservoir		Reservoir frozen over	390	6	no	3210				Jochim, M.
251	MBMG251	Hill	32N 08E 24 DCCC	01 01 78	Well		Domestic use	4950	3.5	no	3190		76		Anderson
252	MBMG252	Hill	32N 09E 28 DDDA	01 01 76	Well		Domestic use	3830	14	no	3120		134		Reverman
253	MBMG253	Hill	31N 09E 09 AAAA	01 01 76	Well		Domestic use except for drinking	1960	13	no	3140		100		Lynch
254	MBMG254	Hill	31N 09E 34 CCDD	01 01 76	Reservoir		Reservoir frozen over	360	1.6	no	3060				Gatezmer
255	MBMG255	Hill	31N 09E 06 AAAD	01 02 78	Well	12 gpm	Domestic use except for drinking	4080	18.6	no	3140		100		Moog
256	MBMG256	Hill	31N 08E 16 AADC	01 02 78	Reservoir			410	6	no	3190				
257	MBMG257	Hill	29N 08E 06 AABD	01 02 76	Well	8 gpm	Domestic use except drinking	3860	13	no	2940		240		Holland, D.
258	MBMG258	Hill	30N 08E 31 CCBD	01 02 76	Well		Domestic use	3720	18	no	2940		260		Hun
259	MBMG259	Hill	29N 08E 23	01 02 76	Reservoir		Reservoir frozen over	390	8.5	no	2880				Schrouder
260	MBMG260	Hill	29N 08E 24 CBBD	01 02 76	Reservoir		Reservoir frozen over	420	1	no	2860				Scmonsins
261	MBMG261	Hill	29N 08E 14 ACAD	01 02 76	Pond		Pond frozen over	490	0.7	no	2880				Schrouder
262	MBMG262	Hill	30N 08E 12 BBBD	01 02 76	Well		Domestic use	690	4.5	no	2980		26		Solum
263	MBMG263	Hill	30N 08E 12 BBBA	01 02 78	Reservoir		Reservoir frozen over	880	3.5	no	2980				Solum
264	MBMG264	Hill	30N 08E 14 DADB	01 02 78	Well		Domestic use	1690	2.6	no	2880		60		Holland
265	MBMG265	Hill	30N 09E 34 BCCC	01 02 78	Creek		East Fork Creek	440	3.2	no	2880				
266	MBMG266	Hill	30N 10E 31 BDDD	01 02 78	Well		Domestic and stock use	540	6.5	no	2880		20		Diemert
267	MBMG267	Toole	31N 01W 01 DAAB	09 10 76	Reservoir		Stock reservoir	230	17	no	3300				McKechnie, J.
268	MBMG268	Toole	31N 03E 02 ABA	09 10 75	Reservoir			240	17.8	no	3220				McIntyre
269	MBMG269	Toole	32N 03E 33 BDCC	09 10 76	Reservoir			320	16	no	3140				Ostrem, C.
270	MBMG270	Toole	32N 03E 16 CCAD	09 10 76	Reservoir			700	18.1	no	3210				Kinyon, R.

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271	MBMG271	Toole	32N 03E 12 BCBD	09 10 75	Reservoir			420	17.1	no	3320				Burd, M
272	MBMG272	Toole	32N 02E 15 ADAA	09 12 75	Reservoir			550	18.2	no	3180				Hellinger, Dean
273	MBMG273	Toole	32N 02E 08 DADA	09 12 75	Reservoir			880	14.9	no	3200				Hellinger, R
274	MBMG274	Toole	32N 02E 09 BCCB	09 12 75	Reservoir			430	13.8	no	3210				Bussell, D
275	MBMG275	Toole	32N 02E 09 ADAD	09 12 75	Reservoir			690	14.2	no	3230				Bussell, D
276	MBMG276	Toole	33N 02E 35 AABA	09 12 75	Creek		Willow Creek	2060	13.8	no	3130				
277	MBMG277	Toole	33N 02E 28 BBDA	09 12 75	Reservoir			680	15.7	no	3320				Harwood, R.
278	MBMG278	Toole	32N 02E 02 DDDA	09 12 75	Well			2050	14.9	no	3120				Snuffer, D.
279	MBMG279	Toole	32N 03E 05 CDCC	09 12 75	Reservoir			290	15.2	no	3260				Childers, E.
280	MBMG280	Toole	32N 03E 12 CDCD	09 12 75	Reservoir			190	15.9	no	3220				Akelsted, D.
281	MBMG281	Toole	33N 03E 22 BCBC	09 13 75	Well		Domestic use	1390	17	no	3340				Hanson, B.
282	MBMG282	Toole	33N 03E 22 BCBA	09 13 75	Well		Unused	450	9.2	no	3340				Hanson, B.
283	MBMG283	Toole	32N 01E 11 ADAB	09 13 75	Reservoir			390	18.2	no	3200				Kanning, L.
284	MBMG284	Toole	33N 01E 35 CDAB	09 13 75	Reservoir			340	17.2	no	3240				Bussel
285	MBMG285	Toole	33N 01E 08 BCBD	09 13 75	Reservoir			400	16.5	no	3290				Stewart, B. F.
286	MBMG286	Toole	33N 01E 24 CCDD	09 13 75	Reservoir			330	13.8	no	3320				Stewart, B. F
287	MBMG287	Toole	33N 01E 22 CBCB	09 13 75	Reservoir			370	16	no	3350				Hagen, A.
288	MBMG288	Toole	33N 01E 22 CCDC	09 13 75	Reservoir			1250	12.5	no					Hagen, A.
289	MBMG289	Toole	31N 02W 01 CABC	09 14 75	Reservoir			1450	16	no	3370				Kelbfleisch
290	MBMG290	Toole	31N 01W 03 CBBB	09 14 75	Reservoir			300	17.5	no	3360				Mcleen
291	MBMG291	Toole	31N 03E 24 ACAC	09 14 75	Reservoir			240	14	no	3080				Sisk, R.
292	MBMG292	Toole	30N 03E 03 CCCC	09 14 76	Reservoir			200	14.2	no	3240				Diemert, D.
293	MBMG293	Toole	31N 02E 22 BBDD	09 14 75	Well			4210	10.1	no	3300				Benjamin, J.
294	MBMG294	Toole	30N 01W 11 DDBB	09 14 76	Well			1280	13.5	no	3270	9	12		Heptner, K.
295	MBMG295	Toole	29N 02E 21 ADBD	09 15 75	Reservoir			4990	18.2	no	3400				Nickol, P.
296	MBMG296	Toole	29N 02E 22 BCDB	09 15 75	Well			6090	16.5	no	3380				Nickol, P.
297	MBMG297	Toole	29N 02E 21 BCBC	09 15 75	Spring			23190	17	no	3480				Nickol, P.
298	MBMG298	Toole	29N 02E 21 BAAD	09 15 75	Spring			18010	12.9	no	3480				Nickol, P.
299	MBMG299	Toole	29N 01E 06 BABB	09 15 75	Well			1980	10.4	no	3670				Judisch, J.
300	MBMG300	Toole	30N 01E 31 CACC	09 18 75	Well			700	11.2	no	3660				Russel, Cliff

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301	MBMG301	Toole	30N 01E 31 CACC	09 16 75	Well			670	11.5	no	3560	6	12		Russel, Cliff
302	MBMG302	Toole	30N 01E 31 CCCB	09 16 75	Well			2470	10.8	no	3560	1	9.9		Russel, Cliff
303	MBMG303	Toole	30N 01E 01 CBCC	09 16 75	Well			1320	13.2	no	3250	15	24		Korkan-Stevens
304	MBMG304	Toole	30N 01E 11 BACA	09 18 75	Well			2460	13.3	no	3150	6	6.5		Korkan
305	MBMG305	Toole	30N 02E 04 CCDC	09 16 75	Well			1050	14	no	3220	13	21		Robertson, M
306	MBMG306	Toole	31N 02E 31 ABDA	08 15 75	Reservoir			300	18.7	no	3300				Dunning, W
307	MBMG307	Toole	32N 01W 11 DCBA	09 18 75	Well			5810	10.7	no	3320				McCarter
308	MBMG308	Toole	33N 02W 26 AAAD	09 17 75	Reservoir			3580	16.5	no					Nesbo, J.
309	MBMG309	Toole	34N 02W 16 DDDB	09 17 75	Well			6300	9.8	no		6	12.5		Roark, Louis
310	MBMG310	Toole	33N 01W 26 CBBB	09 17 75	Reservoir			5590	13	no	3300				Benjamin, H. F. Jr.
311	MBMG311	Toole	34N 01W 26 ACCC	08 17 75	Well			1020	9.2	no	3480		35		Collier
312	MBMG312	Toole	34N 01E 24 CBCC	08 17 75	Well			520	14	no	3300				Johansen, Jay
313	MBMG313	Toole	34N 02E 16 CDDD	09 17 75	Creek		Willow Creek	1910	16.8	no	3300				
314	MBMG314	Toole	34N 03E 20 ABBA	09 17 76	Well			1440	15.8	no	3520				Akelstad, Gary
315	MBMG315	Toole	33N 03E 01 CBCD	09 17 75	Well			6420	12	no	3430	10	13.7		Markuson, H.
316	MBMG316	Toole	33N 03E 01 CCBD	09 17 75	Well			1300	11.3	no	3420	15	21		Markuson, H.
317	MBMG317	Toole	33N 03E 23 ACDD	09 17 75	Well			6440	9.9	no	3380		30		Harwood, T.
318	MBMG318	Chouteau	27N 07E 04 DDCC	08 04 76	Reservoir			190	21	no	3170				
319	MBMG319	Chouteau	27N 07E 11 CDAC	08 04 76	Reservoir		Reservoir contains much vegetation	220	20	no	3220				
320	MBMG320	Chouteau	27N 07E 21 BDDB	08 04 76	Reservoir			260	20	no	3230				
321	MBMG321	Chouteau	26N 06E 08 BBBB	08 05 76	Well			1780	11.5	no	3400		28		Witt
322	MBMG322	Chouteau	27N 05E 25 ACDC	08 05 76	Reservoir			16310	8.8	no	3210				Witt
323	MBMG323	Chouteau	27N 05E 26 CBCD	08 05 76	Well			1870	7.6	no	3290				Witt
324	MBMG324	Chouteau	27N 05E 35 BCCC	08 05 76	Spring			9680	10.8	no	3250				Witt
325	MBMG325	Chouteau	26N 04E 08 ABBC	08 08 76	Well		Domestic use	4550	13.3	no	3360		20		Willey
326	MBMG326	Chouteau	29N 09E 08 CCCC	08 09 76	Well	4 gpm	Domestic use	2340	11	no	2880		220		Boehm
327	MBMG327	Chouteau	29N 09E 06 AABA	08 09 76	Well	2 gpm	Domestic use	2040	18	no	2890		320		Horel
328	MBMG328	Chouteau	29N 10E 18 CCCC	08 09 76	Well			3370	11.8	no	2980	200	431		Bold
329	MBMG329	Chouteau	29N 09E 18 CBBC	08 09 76	Well			4160	11.4	no	2900		320		Hansens
330	MBMG330	Chouteau	29N 10E 26 CCCD	08 09 76	Well	3 gpm	Domestic use except for drinking	4840	13	no	2890	80	450		Petersen

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331	MBMG331	Chouteau	29N 13E 21 AAAA	08 09 76	Well			1480	12	no	2860	20	160		Cowen
332	MBMG332	Chouteau	28N 13E 10 ABBA	08 10 76	Well			3590	21	no	2720	20	200		
333	MBMG333	Chouteau	28N 13E 05 DCDD	08 10 76	Pond		Located in a creek bed	870	18	no	2670				
334	MBMG334	Chouteau	28N 11E 12 DDAA	08 09 76	Well			11980	17.1	no	2900		3200		Braun
335	MBMG335	Chouteau	28N 13E 29 DCBA	08 07 76	Creek	24 cfs	Big Sandy Creek	. 410	18	no	2720				
336	MBMG336	Chouteau	27N 12E 05 BAAA	08 07 76	Well	7 gpm	Stock use	9360	12.7	no	2780	86	225		Sorenson
337	MBMG337	Chouteau	27N 13E 07 ADAD	08 09 76	Reservoir		Stock use	1330	20	no					
338	MBMG338	Chouteau	27N 10E 12 BBBC	08 07 76	Well			2250	14.4	no	2940				
339	MBMG339	Chouteau	27N 09E 03 BCCA	08 08 76	Well			2240	15.6	no	2980				
340	MBMG340	Chouteau	27N 13E 27 DDAC	08 10 76	Pool			460	15	no	3080				
341	MBMG341	Chouteau	27N 13E 30 CABC	08 09 76	Reservoir		Stock use	1020	19	no	2730				
342	MBMG342	Chouteau	27N 11E 19 CDBD	08 09 76	Well		Domestic use except for drinking	2310	16	no	2860		250		Robertson, A
343	MBMG343	Chouteau	27N 10E 25 BDAB	08 09 76	Reservoir		Stock reservoir	250	20	no	2840				
344	MBMG344	Chouteau	26N 10E 03 DCCD	08 09 76	Reservoir		Stock reservoir	290	20	no	2940				
345	MBMG345	Chouteau	27N 09E 21 CCCB	08 08 76	Well		Water is not used for drinking	1120	10.4	no	3120				Allard
346	MBMG346	Chouteau	26N 10E 18 ADAB	08 08 76	Reservoir			330	15	no	2900				Briese
347	MBMG347	Chouteau	26N 13E 11 DAAD	08 09 76	Well	30 gpm	Domestic and stock use	1660	14	no	3240	220	280		Nepil
348	75M1670	Chouteau	26N 04E 02 CCC	09 17 75	Pond		Saline seep project area	380	11	yes	3330			211CLRD	Urton
349	76M0250	Chouteau	26N 04E 03 DBDB	04 15 76	Well		Saline seep test area	1950	6	yes	3360	9	90	112DRFT	Urton
350	75M1669	Chouteau	26N 04E 03 DDA	09 17 75	Pond		Saline seep test area	1280	11	yes	3330			211CLRD	Urton
351	75M1672	Chouteau	27N 04E 36 CDDC	09 17 75	Pond		Stock use	330	10	yes	3330			211CLRD	Ames
352	75M1142	Liberty	29N 06E 02 ACAD	07 24 75	Spring	5 gpm	Unused	5590	10	yes	2760				Good, P.
353	75M1141	Liberty	31N 06E 35 BAAC	07 25 75	Well		Unused	2950		yes			235		Layton
354	75M1378	Toole	32N 01E 28 BACA	09 13 75	Pond		Pool in Dunkirk Coulee	15110	16.2	yes	3150			112DRFT	
355	75W0426	Hill	32N 10E 21	03 17 75	Well			1510		yes					Spicher, Daryl
356	75M0002	Toole	33N 02W 02 DDCC	12 03 74	Well		Saline seep test area LF-5	6280		yes	3420	13	27		Flesch, Lester
357	75M0830	Liberty	33N 05E 01 CDDC	07 14 75	Well		Saline seep test area	870		yes	3280			112GLCO	Skari
358	75M1143	Liberty	33N 07E 01 BCBA	07 29 75	Well		Unused	23360	10.5	yes	3300		200		James Farms Inc.
359	75M0829	Liberty	34N 05E 24 ADDD	07 14 75	Well		Saline seep test area SK-4	1330		yes	3320	14	59	211CLGT	Skari
360	75M0831	Liberty	34N 05E 25 ABBB	07 14 75	Well		Saline seep test area SK-9	4900		yes	3320	8	59	211CLGT	Skari

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361	75M1756	Liberty	34N 05E 28 AABA	07 14 75	Well		Saline seep test area, SK-6	1730		yes	3320	16	59	211CLGT	Skari
362	75M0829	Liberty	34N 05E 26 DDDC	07 14 75	Well		Saline seep test area, SK-7	6010		yes	3310	22	69	112GLCO	Skari
363	75M0832	Liberty	34N 05E 36 BAAA	07 14 76	Well		Saline seep test area, SK-10	1360		yes	3300	10	59	112GLCO	Skari
364	76M1462	Liberty	36N 07E 24 CBCA	12 04 76	Well			30420	11	yes			8	112GCDF	Robo, Gustav
365	75M1671	Liberty	37N 07E 31 B	10 18 75	Spring	20 gpm (E)	Irrigation use	1220		yes	3160			211JDRV	Duncan Ranch
366	36M0001	Toole	37N 03W 02 AB	02 18 36	Well		Unused			yes	3526		180	211VRGL	U. S. Government
367	65M0001	Toole	37N 03W 02 CA	10 18 65	Well		Stock use		8.8	yes	3686	80	600	211VRGL	Dye, Homer

Chemical Analyses

Map rel. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
7	37N	08E	20	DDDC	01	13	77	Well	7.8	1.9	666	1.8	.02	.01	8.3	1090	2.4	24	520
13	36N	10E	06	DDCC	01	12	77	Well	9.8	2.8	875	2.6	.23	<.01	8.4	1454		36	653
15	36N	10E	21	8D8A	01	12	77	Well	95.4	39.4	1145	6	.04	.02	8.3	724	11	78	2070
16	36N	09E	28	AB AB	01	12	77	Well	3.3	.9	520	1.5	.04	.01	8.0	1144		152	6.8
18	36N	10E	32	DAAA	01	12	77	Well	3.9	.9	548	1.8	.06	.01	8.1	934		221	116
21	36N	08E	26	888C	01	13	77	Well	10.8	2.8	870	2.4	.03	.01	9.2	1780		196	154
22	35N	08E	01	A888	01	13	77	Well	5.2	1.4	745	1.7	.26	.01	8.1	834		658	8.8
23	35N	10E	04	CBCD	01	12	77	Well	60.4	19.9	800	3.4	.02	.01	8.5	756		31	1243
26	35N	08E	33	DAAA	01	13	77	Well	17.9	8.4	1325	3.2	.11	.01	8.8	1553		78	1525
28	34N	08E	22	88CD	01	13	77	Well	160	154	196	17.5	.21	3.65	8.6	731		14	822
31	33N	08E	05	88AA	01	13	77	Well	8.7	2.2	846	2	.19	.01	8.3	544	20	203	1062
34	34N	12E	19	8C8D	01	11	77	Well	11.4	5.5	596	3.8	.05	<.01	10.3	541	10.1	46	674
37	34N	10E	14	8CA8	01	12	77	Well	94	41	468	5.4	.84	.07	10.3	471		19	909
39	34N	10E	14	8CAA	01	12	77	Well	84.5	45	390	2.8	.07	.05	12.0	512		18	706
44	35N	11E	31	DCCC	01	12	77	Well	17.4	4.6	1095	3.4	.05	<.01	9.8	842		47	1667
45	34N	11E	24	CDDD	01	11	77	Well	27.4	16.9	1390	50.8	.23	<.01	25.9	1235	71.5	27	1930
60	33N	10E	07	D	01	13	77	Well	5.8	2.2	1105	3	.05	<.01	8.9	717		1340	1.5
61	33N	09E	15	88CC	01	12	77	Well	254	193	3430	11.9	.05	.07	4.7	484		459	7335
64	33N	09E	28	DDA	01	12	77	Well	7.2	1.9	680	1.8	.06	.02	8.7	888		20	709
104	29N	10E	18	CCD8	01	14	77	Well	3.8	1	740	1.8	.08	<.01	9.0	876		657	.6
105	29N	10E	28	CB8D	01	14	77	Well	5.5	·1.5	870	1.9	.32	.01	7.2	605		1035	1.6
106	28N	11E	22	8CAD	01	14	77	Well	153	52	16.3	9.1	.09	.01	13.3	375		26	207
107	28N	12E	33	CCCC	01	14	77	Well	8.2	2.3	1220	3.1	.52	.02	7.8	677		1524	2.1
108	36N	07E	03	8DA8	04	12	76	Well	68	37	84	2.9	.02	.07	4.0	167		25	308.3
109	36N	07E	03	8CDD	04	12	76	Well	47.6	24	41.4	2.2	.04	.01	3.4	158		11	155
110	36N	07E	03	8DAD	04	12	76	Well	51.5	35.5	95	2.9	.04	.05	3.5	181		21	316.7
111	36N	07E	24	CBCA	12	04	76	Well	515	136	218	5.2	.07	.08	11.5	352		118	1769
112	36N	07E	34	CCCD	12	04	76	Well	10.6	3.4	860	2.5	.06	.01	8.4	1013		10	1053
113	34N	07E	12	8CCC	12	06	76	Well	47.8	19.8	1920	5.5	.14	.02	10.9	1795		43	2805
114	34N	07E	18	AABA	12	04	76	Well	42.8	14	1500	4.4	.45	.02	8.1	802		97	2718
115	34N	06E	30	8A88	04	12	76	Well	119	51.8	200	9	.10	.91	8.8	1303		22	258
116	34N	07E	27	DAA8	12	05	76	Well	27	13.2	1600	4.4	.05	.01	13.0	3065		18	1060
117	33N	07E	21	DADC	12	05	76	Well	28	11.2	1570	3.8	.06	.02	7.5	588		184	2668
125	34N	01E	21	DAAA	12	03	76	Well	39	37.2	1250	5.6	.08	.01	7.7	1184		117	1766
126	32N	02E	01	CCCC	12	03	76	Creek	235	166	482	25.4	2.30	2.60	15.2	976		71	1407
131	28N	02E	31	8CCC	12	07	76	Well	485	95	145	7.1	.08	.76	13.2	281		252	1240
134	28N	02W	27	BADA	04	14	76	Well	390	1610	2350	12	.22	.04	6.5	425		974	10410
135	28N	01W	36	ADBC	04	14	76	Well	152	107	62	8.5	.15	.55	9.2	342		28	558.3
140	35N	02W	02	DCAA	04	13	76	Well	692	368	258	18	.13	.45	8.8	811		193	2099
141	29N	13E	34	A8C8	01	14	77	Well	25.4	13	710	7.1	.06	.14	21.4	912	9.6	156	617
348	26N	04E	02	CCC	09	17	75	Pond	40.1	22.4	3.6	8.1	.04	<.01	14.5	234		1.46	8.2
349	26N	04E	03	D8D8	04	15	76	Well	153	104	160	16	.07	.10	8.0	190		48	917.8
350	26N	04E	03	DDA	09	17	75	Pond	78.1	78.1	74.5	32.2	<.01	<.01	2.1	126		9.3	580.5
351	27N	04E	36	CDDC	09	17	75	Pond	20.9	12.5	18.4	21.4	.03	.01	3.9	162		10.2	11.2
352	29N	06E	02	ACAD	07	24	76	Spring	257.9	88.2	1228	10	.03	.01	13.0	659		177.5	2815

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

of Selected Waters

Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
7	.312	1.8	8.33	10	2743	1771	27	898	55.5	MBMG	280	211JDRV	Yes	76M1599
13	.158	.9	8.2	9	3437	2306	36	1190	63.5	MBMG	120	112DRFT	Yes	78M1590
15	12.199	.4	8.38	13	5170	3828	400	612	24.9	MBMG	160	211JDRV	Yes	76M1589
16	.542	1.8	8.24	9	2053	1258	12	938	65.5	MBMG	270	211JDRV	Yes	76M1591
18	.111	3	8.08	12	2246	1360	13	766	64.8	MBMG	240	211JDRV	Yes	76M1588
21	.7	.6	8.09	11	3362	2123	38	1460	61.0	MBMG	200	211JDRV	Yes	76M1598
22	.029	.8	8.03	4	3242	1840	19	684	74.9	MBMG	200	211JDRV	Yes	76M1597
23	4.179	1.2	8.12	11	3593	2544	233	620	22.8	MBMG	226	211JDRV	Yes	76M1587
26	<.023	.4	8.08	9	5168	3730	71	1270	68.4	MBMG	165	211JDRV	Yes	76M1596
28	.043	.2	7.92	16	.2328	1736	1020	600	2.7	MBMG	20	112DRFT	Yes	76M1695
31	.106	1.0	8.70	9	3748	2420	31	480	66.3	MBMG	230	211JDRV	Yes	76M1594
34	8.246	.7	8.49	9	2688	1633	51	461	36.3	MBMG	75	211JDRV	Yes	76M1582
37	.025	.3	7.69	9	2708	1780	403	386	10.1	MBMG	68	112DRFT	Yes	76M1684
39	.056	.6	8.03	9	2228	1509	396	420	8.5	MBMG	17	112DRFT	Yes	76M1685
44	.328	.4	8.09	18	4544	3250	62	691	60.3	MBMG	205	211JDRV	Yes	76M1686
45	20.322	.3	8.80	9	5739	4169	138	1130	51.5	MBMG		211JDRV	Yes	76M1583
60	<.023	1.8	8.25	8	4929	2922	24	588	99.1	MBMG	1077		Yes	76M1600
61	89.008	.4	8.23	9	14110	12020	1430	397	39.5	MBMG	183	211JDRV	Yes	76M1692
64	.032	1.4	8.22	10	2837	1868	28	728	58.3	MBMG	90	112DRFT	Yes	76M1693
104	.070	3.0	8.22	10	3184	1848	14	718	87.3	MBMG	436	211EGLE	Yes	76M1607
105	.063	2.9	8.00	12	2956	2224	20	496	84.9	MBMG	340	211EGLE	Yes	76M1606
106	19.202	.1	8.14	14	1126	681	598	308	0.3	MBMG	32	112DRFT	Yes	76M1605
107	.041	1.8	8.11	14	5475	3103	30	555	97.0	MBMG	500	211EGLE	Yes	76M1608
108	.151	.2	7.74	7.1	920	610	317	137	2.1	MBMG	60	112DRFT	Yes	76M0240
109	.043	.2	7.71	12	575	362	218	129	1.2	MBMG	60	112DRFT	Yes	76M0242
110	.219	.2	7.93	8.1	933	606	275	132	2.5	MBMG	35	112DRFT	Yes	76M0241
111	11.63	.2	6.88	13.3	3346	2956	1850	289	2.2	MBMG	12	112DRFT	Yes	76M1461
112	1.02	.7	8.10	5	3494	2449	40	831	58.8	MBMG	125	211JDRV	Yes	76M1464
113	.136	<.1	7.75	14	7473	5737	201	1470	59.0	MBMG	80	211JDRV	Yes	76M1466
114	<.023	.3	7.64	9.2	8138	4680	164	494	50.9	MBMG	120	211JDRV	Yes	76M1465
115	<.023	.5	7.79	9.5	1706	1313	510	1070	3.9	MBMG	54	112DRFT	Yes	76M0243
116	.129	.1	7.59	25	5936	4246	122	2510	63.1	MBMG	100	211JDRV	Yes	76M1467
117	1.446	.4	8.02	15	6323	4762	111	482	64.8	MBMG	280	211JDRV	Yes	76M1468
125	.041	.6	8.07	7.7	5138	3807	250	971	34.4	MBMG			Yes	76M1459
126	.095	.4	7.25	1.3	3657	2888	1270	800	5.9	MBMG		211CLRD	Yes	76M1460
131	22.5	.3	7.43	21	3070	2399	1600	230	1.6	MBMG	35	112DRFT	Yes	76M1475
134	35.920	2	7.88	7	16310	15600	7600	349	11.7	MBMG	34	112DRFT	Yes	76M0247
135	15.814	.3	7.75	8	1702	1108	820	280	0.9	MBMG	35	112DTSH	Yes	76M0246
140	236.754	.3	7.40	11	5439	4173	3240	501	2.0	MBMG	27	112DRFT	Yes	76M0244
141	.422	1.9	8.36	16	3076	2011	117	764	28.6	MBMG	237	112DRFT	Yes	76M1604
348	2.554	.1	7.38	11	384	214	192	234	0.1	MBMG		211CLRD	No	75M1670
349	.129	.2	7.47	6	1948	1501	810	158	2.4	MBMG	90	112DRFT	Yes	76M0250
350	.138	.2	8.01	11	1278	917	517	126	1.0	MBMG		211CLRD	No	75M1588
351	2.011	.1	7.27	10	329	178	104	182	1.0	MBMG		211CLRD	No	75M1672
352	1.808	.6	7.98	18	5585	4916	1010	659	7.1	MBMG			No	75M1142

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
353	31N	06E	35	BAAC	07	25	75	Well	4.2	.5	748	4.3	.14	<.01	5.3	1300	253	188	79
354	32N	01E	28	BACA	09	13	75	Pond	17.5	10.6	4370	18.1	.14	.01	1.5	1225	667	280.5	7022
355	32N	10E	21		03	17	75	Well	2.6	.8	390					961		39.3	10
356	33N	02W	02	DDCC	12	03	74	Well	706	461	307	26.7	.06	.27	18.3	474		183	2706
357	33N	05E	01	CDDC	07	14	75	Well	85.9	31.2	59.5	2.7	.03	<.01	10.5	338		4.15	183.5
358	33N	07E	01	BCBA	07	29	75	Well	358.0	1124.9	6920	26.3	.16	12.50	5.4	1113		107.6	16170
359	34N	05E	24	ADDD	07	14	75	Well	148.4	53.1	90	5	.44	.77	11.7	361		7.7	448.2
360	34N	05E	25	ABBB	07	14	76	Well	348.4	347.4	523.8	3.5	.56	.85	23.7	337		35.8	3012
381	34N	05E	28	AABA	07	14	75	Well	156.5	74.4	143	4.7	.66	.91	10.5	371		13.6	676
362	34N	05E	26	DDDC	07	14	75	Well	188.6	132.6	974	8	.54	.86	12.5	482		16.65	2552
363	34N	05E	36	BAAA	07	14	75	Well	138.5	60.7	87	3.9	.18	.64	10.7	334		10.55	477.2
364	36N	07E	24	CBCA	12	04	76	Well	475	1408	8550	7	.18	.07	9.5	890		464	20340
365	37N	07E	31	B	10	18	75	Spring	50.2	48.4	143	4.4	<.01	<.01	10.7	165	24.5	9.2	447.5
366	37N	03W	02	AB	02	18	36	Well	28	17	428*					666		25.5	464
367	37N	03W	02	CA	10	19	65	Well	88	13	925*		4			740		18	1410

of Selected Waters (Con't.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
353	.452	2.3	9.14	9.5	2946	1906	13	1550	319	MBMG			No	75M1141
354	4.294	1.1	9.72	18.2	15110	13000	87	1890	312	MBMG		112DRFT	No	75M1378
355	.63		8.30		1510	1407	9	786	56.8	Unknown			No	75W0428
356	1020	.8	7.17		6275	5903	389	389	2.2	Unknown			No	75M0002
357	.226	.5	7.29		866	545	343	338	1.0	MBMG		112OTSH	No	75M0830
358	244.645	.4	6.64	10.5	23350	27520	5520	1110	8.3	MBMG	200		No	75M1143
359	.203	.5	6.90		1333	944	589	361	0.9	MBMG		211CLGT	No	75M0828
360		.8	7.02		4904	4463	2300	337	1.5	MBMG		211CLGT	No	75M0831
361	1.13	.8		6.8	1732	1265	697	371	1.2	MBMG		211CLGT	No	75M1756
362	5.243	.4	6.88		5006	4126	1010	482	6.1	MBMG		112OTSH	No	75M0829
363	.138	.5	6.79		1352	964	596	334	0.9	MBMG		112OTSH	No	75M0832
364	971	.3	8.24	11	30420	32670	6980	730	44.5	MBMG		112DRFT	Yes	78M1462
365	.362	.3	6.43		1219	820	325	180	2.9	MBMG		211JDRV	No	75M1671
366							140	546		USGS	180	211VRGL	No	36M0001
367	2.169	1.0		8.9			105	607		USGS	600	211VRGL	No	65M0001

SHELBY 1° x 2° Sheet

Trace Elements Analyses Sheet

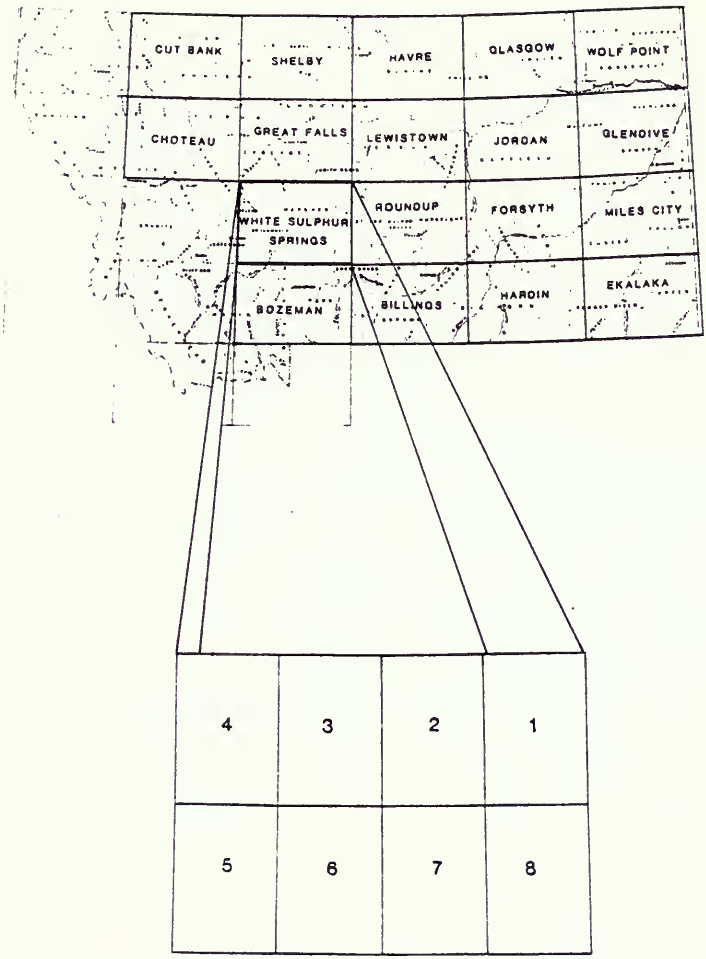
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Baryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
7	37N 08E 20 DDDC	< .05	< .2	< 2.0		1.2		< .01	< 01	< .05	.11	< .3	< .01	189	< 2 0		.29	.27	.08	76M1599
13	36N 10E 06 DDCC	< .05	< .2	< 2.0		1.3		< .01	< .01	< .05	.18	< .3	.01	.061	17.1		.39	.30	21	76M1590
15	36N 10E 21 BDBA	< .05	< .2	< 2.0		.4		< .01	.22	< .05	29	< .3	03	.018	140		1.67	.55	.98	76M1589
16	36N 09E 28 ABAB	< .05	< .2	< 2.0		1.5		< .01	.01	< .05	.07	< .3	< .01	.251	< 2		.08	.08	.09	76M1581
18	36N 10E 32 DAAA	< .05	< .2	< 2.0		1.4		< .01	.12	< 05	.10	< .3	< .01	.072	< 2		.1	< .05	.08	76M1588
21	36N 08E 26 BBBC	< .05	< .2	< 2.0		1.8		< .01	< .01	< .05	.12	< .3	.01	.134	2.5		.45	< .05	.27	76M1598
22	35N 08E 01 ABBB	< .05	< .2	< 2.0		1.6		< .01	.01	< .05	.07	< .3	.01	.202	< 2.0		.24	.17	.10	76M1597
23	35N 10E 04 CBCD	< .05	< .2	< 2.0		1.0		< .01	.02	< .05	.19	< .3	< .01	.036	4.5		1.39	.17	.40	76M1587
26	35N 08E 33 DAAA	< .05	< .2	< 2.0		2.2		< .01	< .01	< .05	.17	< .3	.01	.049	< 2.0		1.07	< .05	.62	76M1596
28	34N 08E 22 BBCD	< .05	< .2	< 2.0		.2		< .01	.01	< .05	09	< .3	.03	.038	< 2.0		1.4	69	.18	76M1595
31	33N 08E 05 BBAA	< .05	< .2	< 2.0		1.8		< .01	01	< .05	.09	< .3	< .01	.218	< 2 0		.42	.15	.03	76M1594
34	34N 12E 19 BCBD	< .05	< .2	< 2.0		.2		< .01	< 01	< .05	.16	< .3	< .01	.023	150		.33	.14	.09	76M1582
37	34N 10E 14 BCAB	.05	< .2	< 2.0		.4		< .01	< .01	< .05	.11	< .3	.01	.052	< 2.0		1.98	.10	.66	76M1584
39	34N 10E 14 BCAA	< .05	< .2	< 2.0		.4		< .01	< .01	< .05	.09	< .3	.02	.078	< 2.0		1.18	.15	.13	76M1585
44	35N 11E 31 DCCC	< .05	< .2	< 2.0		1		.01	< .01	< .05	.25	< .3	.01	.085	32		.71	.07	.20	76M1586
45	34N 11E 24 CDDD	< .05	< .2	< 2.0		.4		< .01	.05	< .05	.53	< .3	.02	.284	13.6		.79	< .05	.17	76M1583
60	33N 10E 07 D	< .05	< .2	< 2.0		4.0		< .01	< .01	< .05	.16	< .3	< .01	.026	< 2.0		.61	.24	.04	76M1600
61	33N 08E 15 BBCC	< .05	.3	< 2.0		1.1		< .01	.02	.13	.30	< .3	.08	.033	976		7.1	1.35	.05	76M1592
64	33N 09E 28 DDA	< .05	< .2	< 2.0		1.4		< .01	< .01	< .05	.12	< .3	.01	.065	< 2.0		.3	< .05	.21	76M1593
104	29N 10E 18 CCDB	< .05	< .2	< 2.0		3.7		< .01	< .01	< .05	.09	< .3	< .01	.033	< 2.0		.25	.17	.03	76M1607
105	29N 10E 29 CBBD	< .05	< .2	< 2.0		2.2		< .01	.03	.05	.08	< .3	< .01	.038	5.5		.31	.34	.42	76M1606
106	28N 11E 22 BCAD	< .05	< .2	< 2.0		.1		< .01	.01	< .05	.04	< .3	.01	.026	6.5		.69	.55	3.00	76M1606
107	28N 12E 33 CCCC	< .06	< .2	< 2.0		2.5		< .01	.01	< .05	.14	< .3	< .01	.042	< 2.0		.76	.53	.09	76M1608
108	36N 07E 03 BDAB	< .05	< .2	< 2.0	< 6	.1	< .01	< .01	.02	< .05	.04	< .3	.02	.010	3.3		.58	.16	.03	76M0240
109	36N 07E 03 BCDD	.05	< .2	< 2.0	< 6	.1	< .01	< .01	.01	< .05	.02	< .3	.02	.015	< 2.0		.44	< .05	.02	76M0242
110	36N 07E 03 BDAD	< .05	< .2	< 2.0	< 5	.1	.01	< .01	.01	.05	.03	< .3	.02	.012	< 2.0		.5	.08	.02	76M0241
111	36N 07E 24 CBCA	.06	.2	2.0		.2		.01	.02	.12	.05	< .3	.05	.042	< 2.0		.83	.25	.54	76M1461
112	36N 07E 34 CCCD	.09	< .2	2.5		1.9		< .01	< .01	< .05	.12	< .3	.02	.137	< 2.0		.49	< .05	.34	76M1464
113	34N 07E 12 BCCC	.07	< .2	2.8		2.9		< .01	.01	< .05	.40	< .3	.05	.036	< 2.0		2.92	.11	.19	76M1465
114	34N 07E 18 AABA	< .05	< .2	< 2.0		3.5		< .01	< .01	< .05	.19	< .3	.03	.052	< 2.0		2.18	.08	.11	76M1466

SHELBY 1° x 2° Sheet (Con't.)

Trace Elements Analyses Sheet (Con't.)

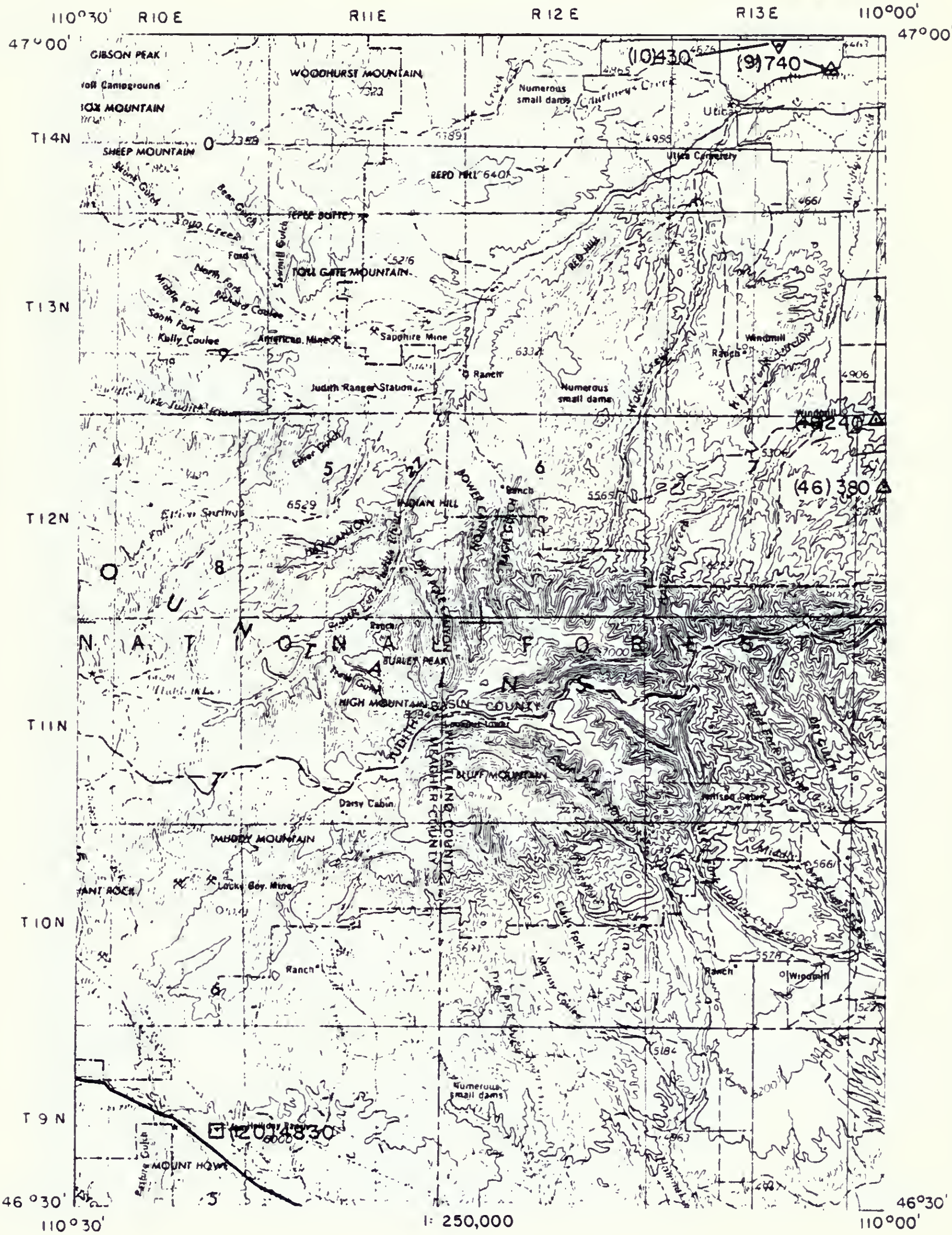
Map ref. no.	Location T R Sec Tract	Aluminum (mg/l)	Antimony (mg/l)	Arsenic (µg/l)	Beryllium (µg/l)	Boron (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lithium (mg/l)	Mercury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Strontium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
115	34N 06E 30 BABB	< .05	< .2	4	< 5	.2	< .01	< .01	< .01	.05	.06	< .3	.03	4.303	< 2.0		1.68	.14	.06	76M0243
116	34N 07E 27 DAAB	.06	< .2	< 2.0		2.8		< .01	.28	< .05	.30	< .3	.04	.059	< 2.0		1.75	.10	.11	76M1487
117	33N 07E 21 DADC	.06	< .2	< 2.0		2.2		< .01	< .01	< .05	.17	< .3	.06	.114	< 2.0		1.60	.06	.47	76M1468
125	34N 01E 21 DAAA	< .05	< .2	< 2.0		1.6		< .01	.01	.05	.66	< .3	.03	.033	< 2.0		3.06	.13	.03	76M1459
126	32N 02E 01 CCCC	.12	< .2	4.1		.7		< .01	.01	.07	.16	< .3	.04	.39	2.5		2.46	.35	.30	76M1460
131	28N 02E 31 BCCC	.12	.2	< 2.0		.4		< .01	.15	.10	.10	< .3	.06	.023	3.9		2.49	.18	.09	76M1475
134	28N 02W 27 BADA	.1	.65	< 2.0	< 5	.8	.03	.04	.06	.28	.54	< .3	.17	.066	520		8.60	1.44	.08	76M0247
135	28N 01W 36 ADBC	.1	< .2	< 2.0	< 5	.2	< .01	< .01	.01	< .05	.08	< .3	.02	.039	8.8		1.28	.20	.05	76M0248
140	35N 02W 02 DCAA	.07	.33	< 2.0	< 5	.5	.01	.01	.03	.15	.37	< .3	.17	.127	87.5		6.45	.35	.07	76M0244
141	29N 13E 34 ABCB	< .05	< .2	2.9		1.1		< .01	.02	< .05	.07	< .3	< .01	.085	< 2.0		.67	.65	.02	76M1604
349	26N 04E 03 DBDB	< .05	< .2	< 2.0	< 5	.2	< .01	< .01	.01	< .05	.08	< .3	.03	.055	15.8		1.81	.14	.06	76M0250
364	36N 07E 24 CBCA	.06	1.6	< 2.0		1.1		.07	.07	.38	1.04	< .3	.31	.046	1720		11.2	2.63	.04	76M1452

LOCATION BASE MAP



WHITE SULPHUR SPRINGS 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY



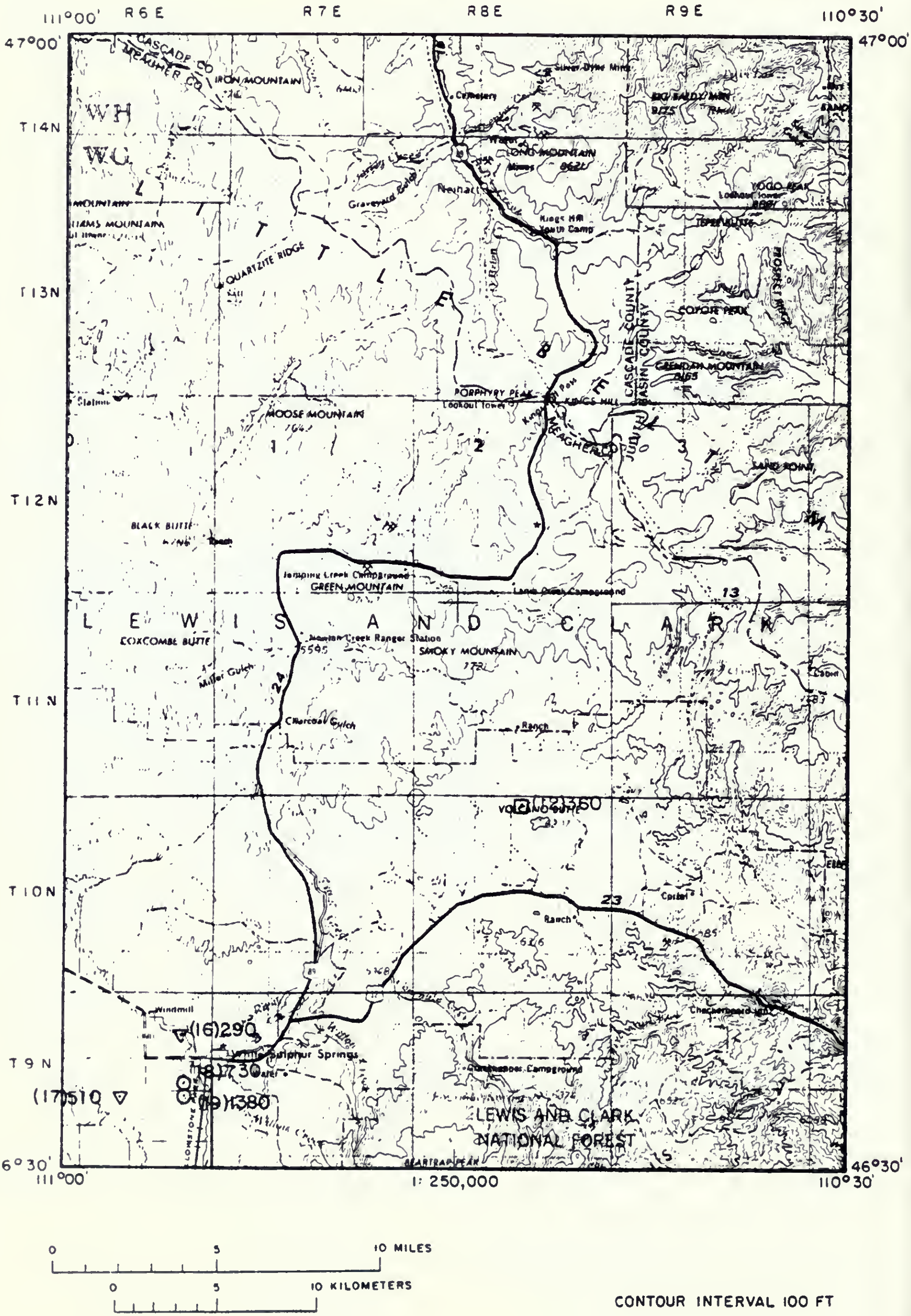
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

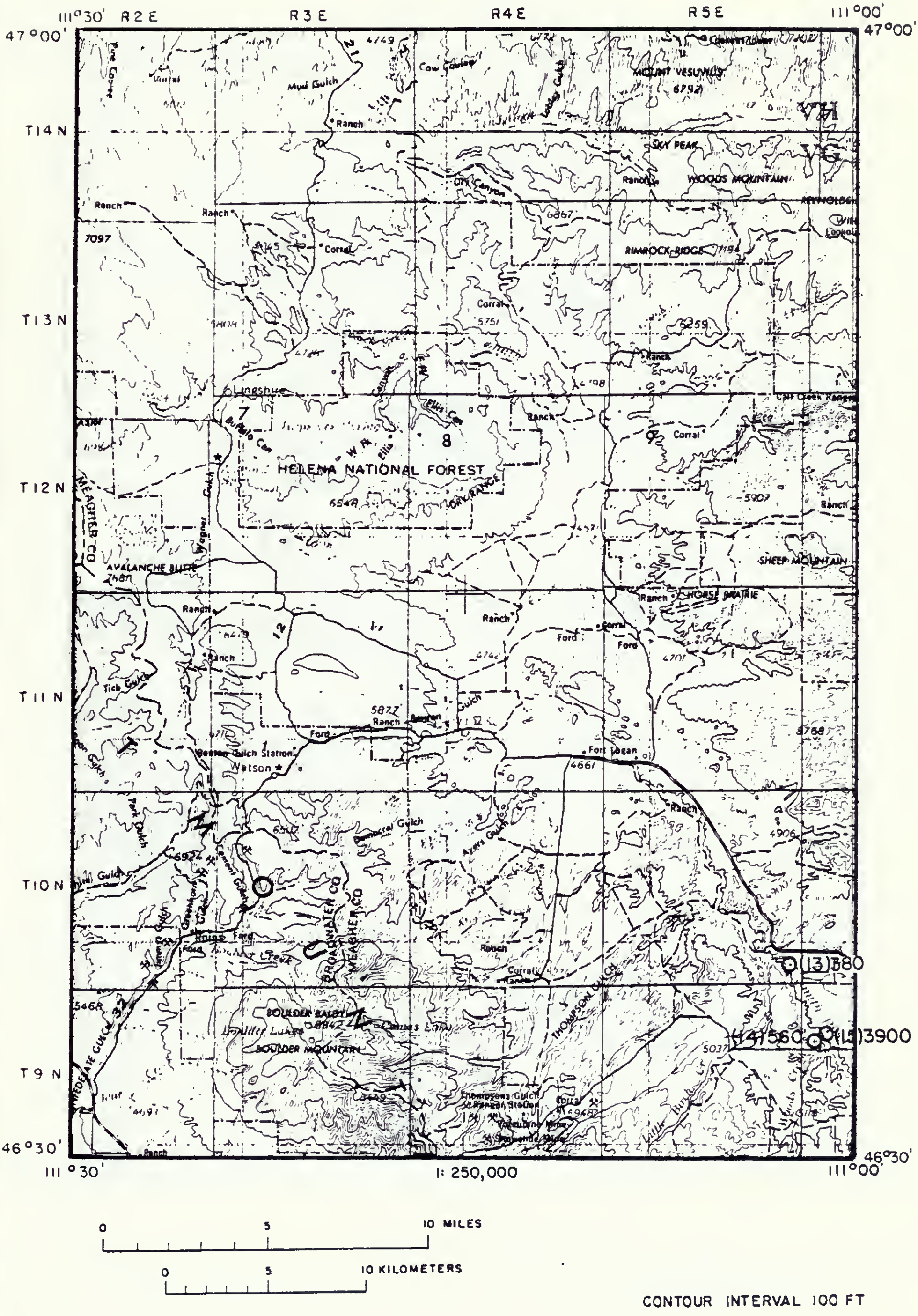
CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



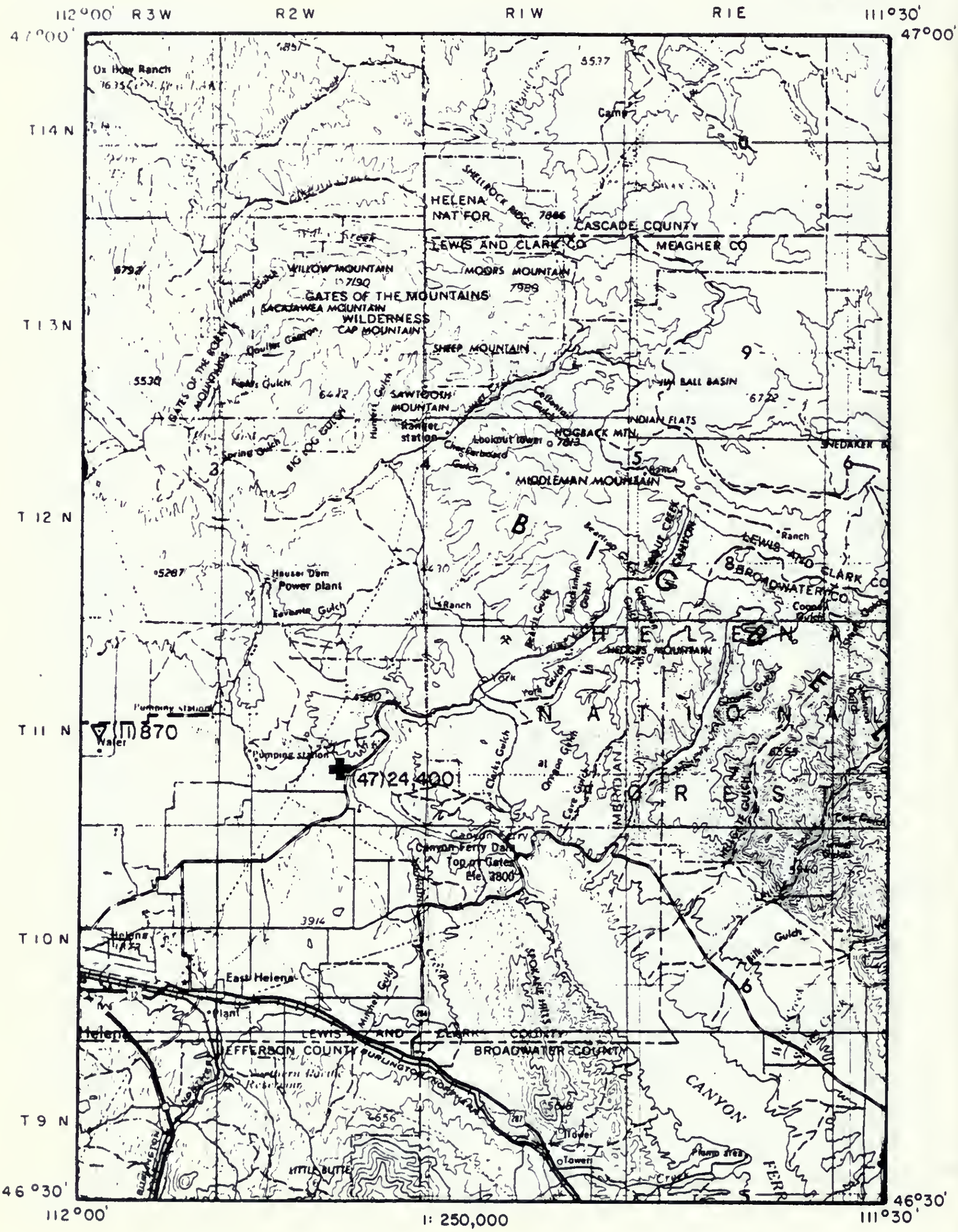
SPECIFIC CONDUCTANCE SURVEY

WHITE SULPHUR SPRINGS 3



SPECIFIC CONDUCTOR SURVEY

WHITE SULPHUR SPRINGS 4



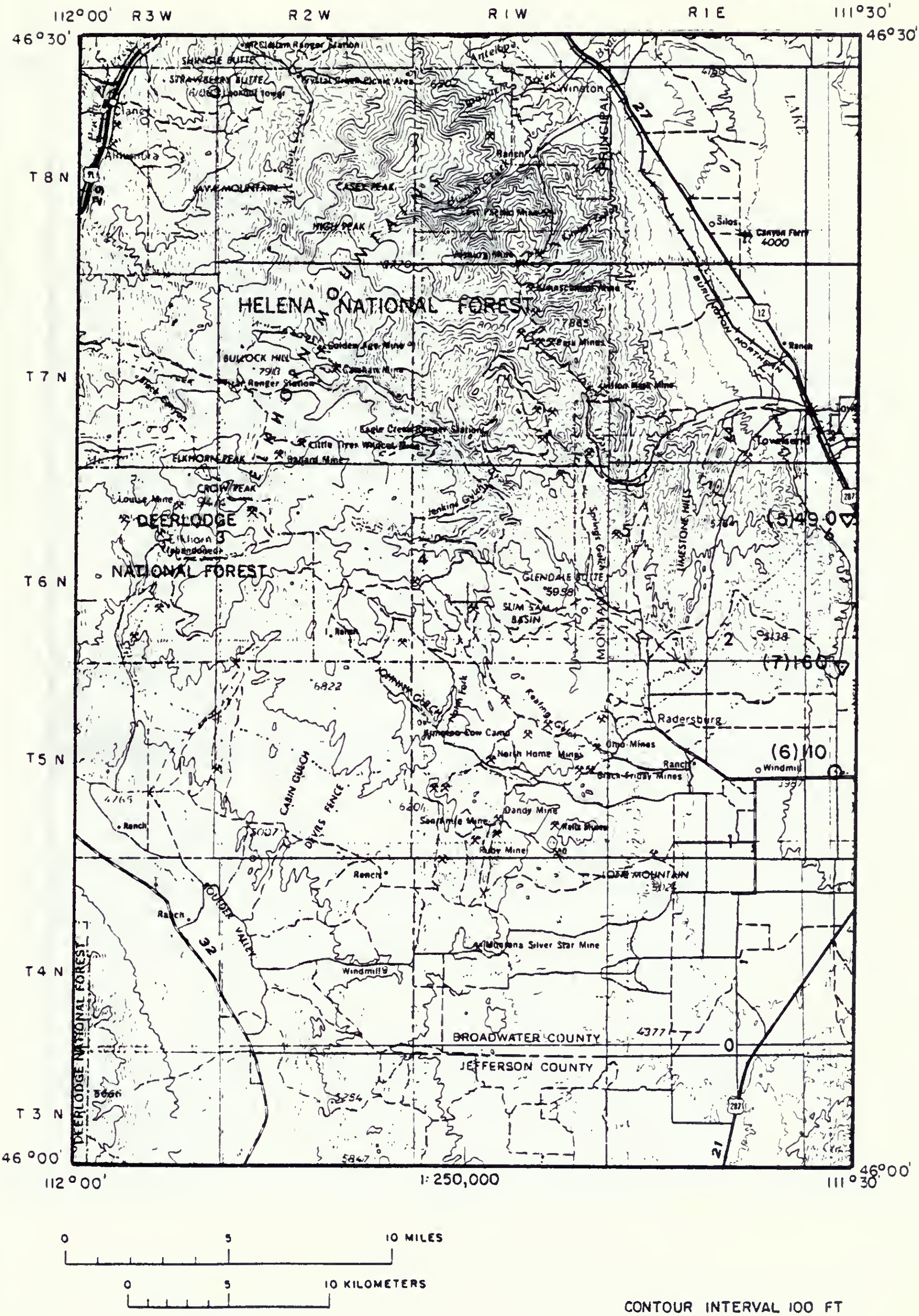
1: 250,000

0 5 10 MILES

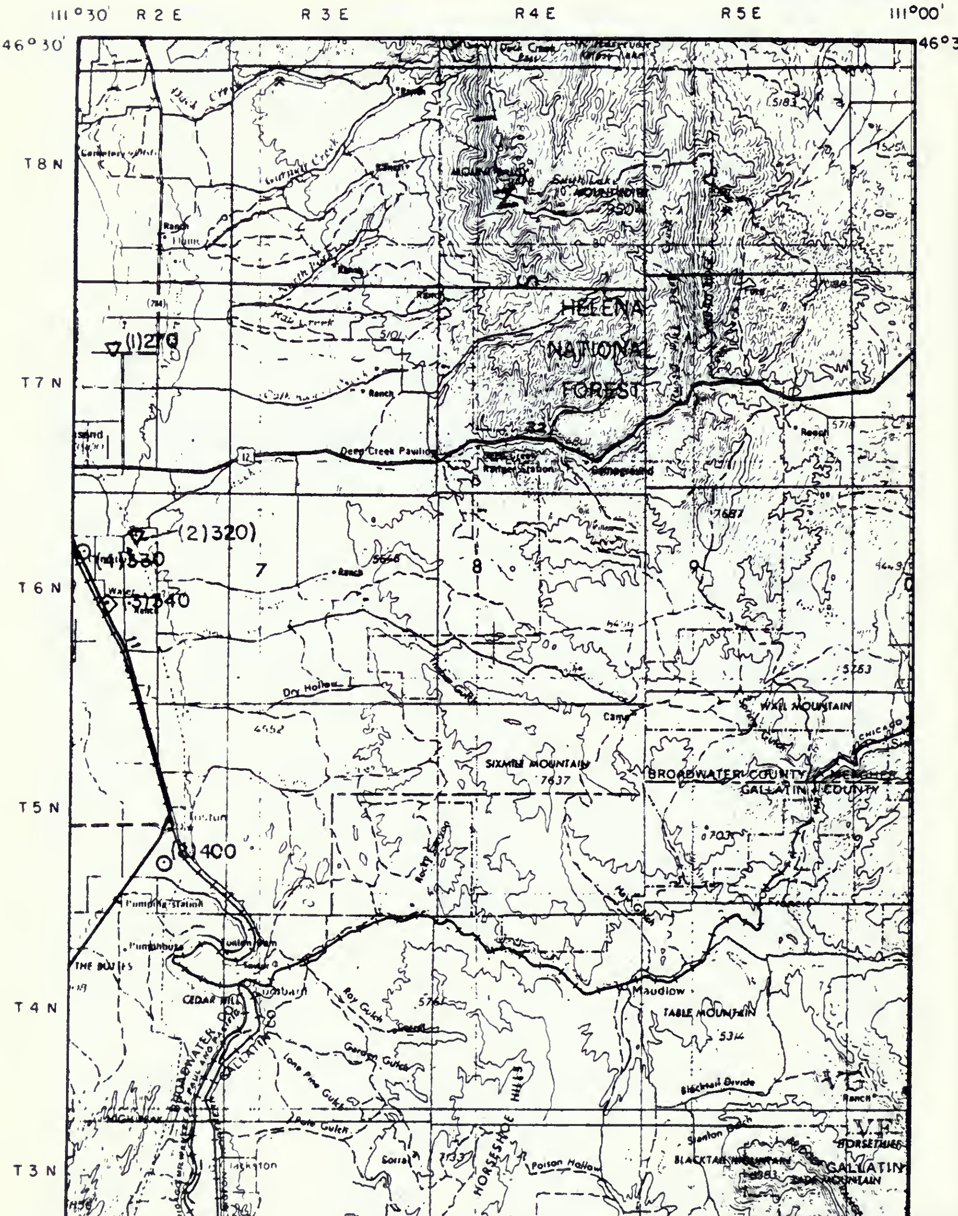
0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



SPECIFIC CONDUCTANCE SURVEY



1: 250,000

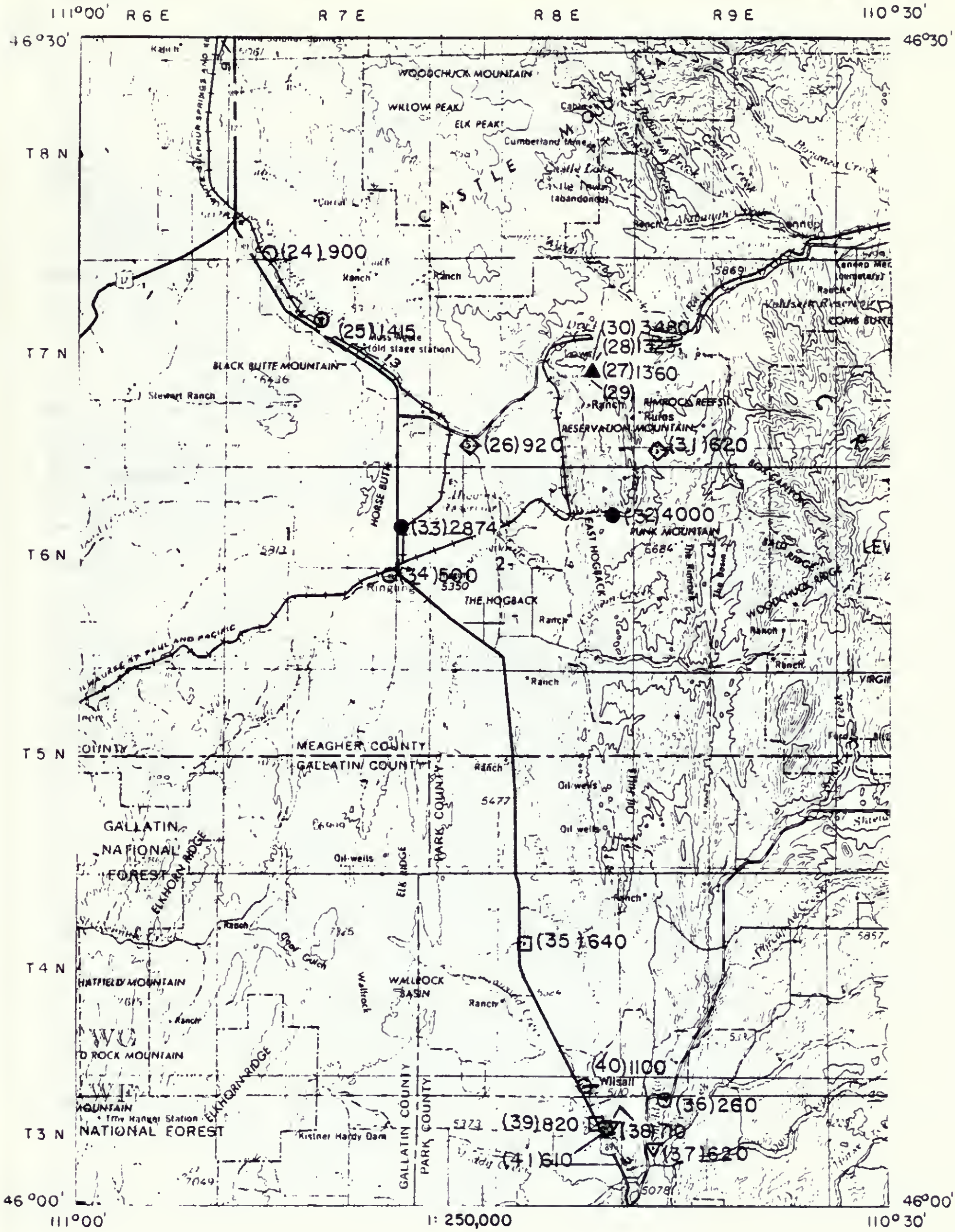
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

WHITE SULPHUR SPRINGS 7



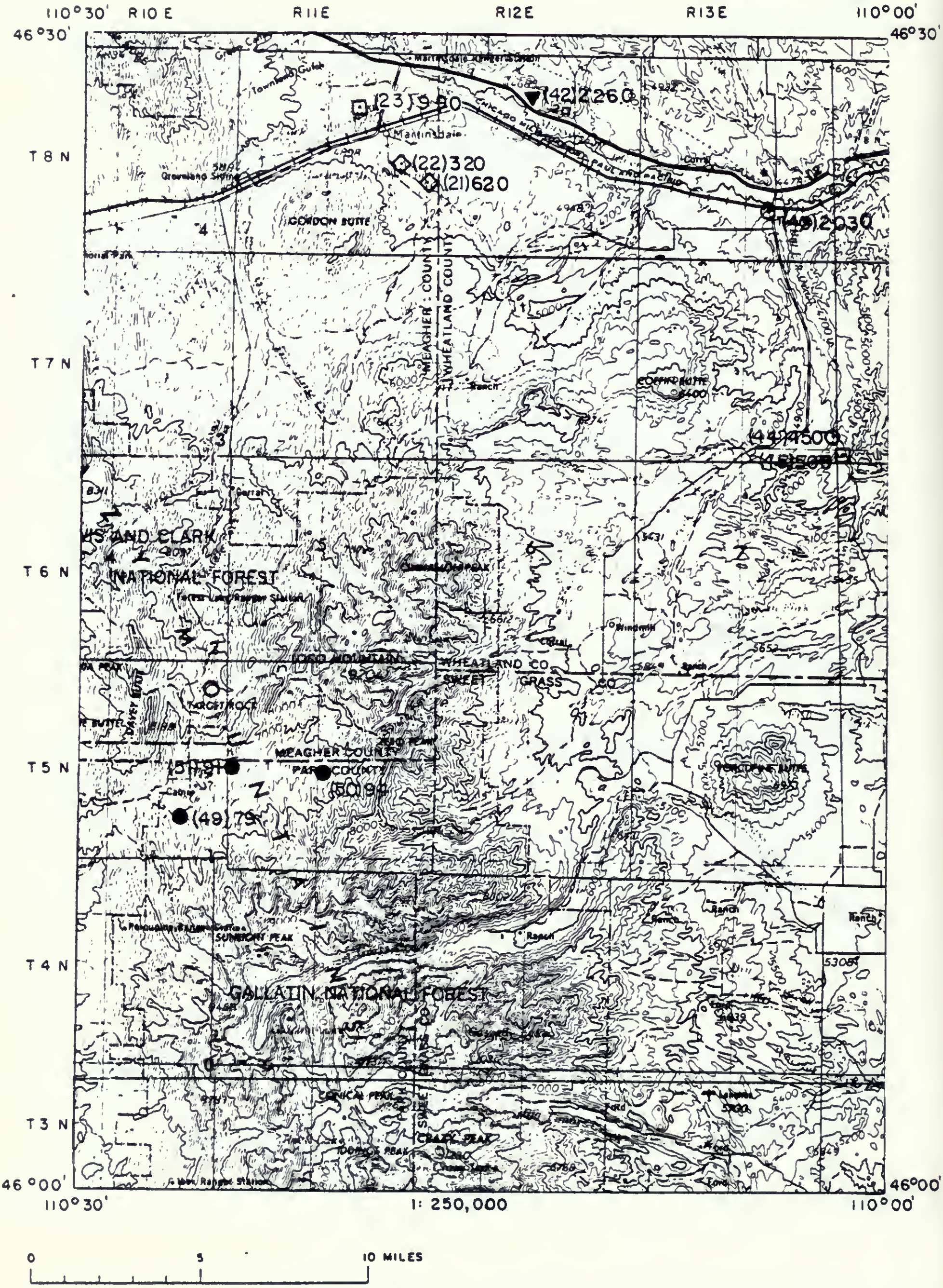
1: 250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

WHITE SULPHUR SPRINGS 1° x 2° Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB4	Broadwater	07N 02E 09 DCC	09 08 76	Ditch	60 cfs (E)	Montana Canal 3 miles NW of Townsend	270		no					
2	WQB3	Broadwater	06N 02E 10 BAA	09 07 76	Ditch	40 cfs (E)	Broadwater Canal 1.5 miles SE of Townsend	320		no					
3	WQB5	Broadwater	06N 02E 21 BAB	09 08 76	Spring	4 cfs (E)	Small warm spring 0.25 mile N of Gregson Creek	340		no					
4	WQB1	Broadwater	06N 02E 08 DBD	09 07 76	Creek	40 cfs (E)	Deep Creek at highway 287	330		no					
5	WQB2	Broadwater	06N 02E 08 CAB	09 07 76	Ditch	1 cfs (E)	Ditch draining alkali field	490		no					
6	WQB7	Broadwater	06N 02E 19 ADD	09 08 76	Creek	10 cfs (E)	Crow Creek 3 miles E of Toston	110		no					
7	WQB8	Broadwater	06N 02E 06 BBA	09 08 76	Ditch	4 cfs (E)	Toston Canal 4.5 miles SE of Toston	160		no					
8	WQB6	Broadwater	05N 02E 26 BDC	09 08 76	Creek	12 cfs (E)	Warm Springs Creek at highway 287	400		no					
9	MBMG63	Judith Basin	14N 13E 11 DDDC		Well		Domestic well, moderately hard water	740	14.5	no	4338		26		OJA
10	MBMG62	Judith Basin	14N 13E 16 CCDC		Well		Water hard, residents use water softener	430	11.6	no	4420				Perry
11	WQB30	Lewis & Clark	11N 03W 21	11 20 75	Drain	1 cfs (E)	Helena Valley, alkali along sides	870		no					
12	WQB15	Meagher	10N 08E 03 BB	09 09 76	Pond	no flow	Surrounded by sage brush amongst rolling hills	360		no					
13	WQB2	Meagher	10N 06E 36	11 03 75	Stream	5 cfs (E)	Newland Creek, rangeland with some crop land	380		no					
14	WQB11	Meagher	09N 06E 07 CA	09 08 76	Stream	0.25 cfs (E)	Boggy pasture with buffalo brush and Canadian thistle	660		no					
15	WQB10	Meagher	09N 06E 07 AC	09 08 78	Stream	1 cfs (E)	Boggy, near field of wild hay	3900		no					
16	WQB3	Meagher	09N 06E 12 B	11 03 75	Ditch	1 cfs (E)	Irrigation return	290		no					
17	WQB1	Meagher	09N 06E 22 B	10 18 75	Ditch	1 cfs (E)	Irrigation into North Fork Smith River	610		no					
18	WQB12	Meagher	09N 06E 13 CCC	09 08 78	Stream	2.5 cfs (E)	North Fork Smith River, bottom land hay meadow	730		no					
19	WQB16	Meagher	09N 06E 24 BB	09 01 76	Stream	1 cfs (E)	Branch of Lone Willow Creek	1380		no					
20	WQB14	Meagher	09N 10E 24 BB	09 09 76	Pond	no flow	Bog surrounded by prairie grasses, irrigation ditch	4830		no					
21	WQB4	Meagher	08N 11E 24 D	11 04 75	Spring	25 gpm	From hills W of Martinsdale Reservoir, all rangeland	620		no					
22	WQB5	Meagher	08N 11E 23 A	11 04 75	Spring	10 gpm	From hills W of Martinsdale Reservoir, all rangeland	320		no					
23	WQB13	Meagher	08N 11E 10 DB	09 09 78	Pond		Near Martinsdale Reservoir, rolling hills, hay, rangeland	890		no					
24	WQB8	Meagher	08N 07E 32	11 04 75	River	2 cfs (E)	South Fork Smith River	900		no					
25	WQB17	Meagher	07N 07E 09 DDD	09 01 78	River	no flow	Southeast Fork Musselshell River	1420		no					
26	WQB7	Meagher	07N 08E 32 B	11 04 75	Spring	25 gpm (E)	Originates in dryland farming area to E	920		no					
27	58M0004	Meagher	07N 08E 23 AA	09 02 58	Well		1.5 miles SE of Loweth	1360		yes	5898			221MRSN	
28	58M0003	Meagher	07N 08E 23 AA	09 02 58	Well		1.5 miles SE of Loweth	1320		yes	5898			217LKOT	
29	58M0007	Meagher	07N 08E 23 AA	09 10 58	Well		1.5 miles SE of Loweth			yes	5898			331MDSN	
30	58M0005	Meagher	07N 08E 23 AA	09 02 58	Well		1.5 miles SE of Loweth	3480		yes	5898			320AMSD	

WHITE SULPHUR SPRINGS 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	WQB6	Meagher	07N 09E 31 DA	11 04 75	Spring	1 cfs (E)	From hills and hay meadows	520		no					
32	WQB9	Meagher	06N 08E 12 BD	11 04 75	Stream		From Higgins Reservoir	4000		yes					
32	WQB19	Meagher	06N 07E 12 CC	09 01 76	Stream	0.5 cfs (E)	Unnamed creek one mile N of Ringling	2874		yes					
34	WQB18	Meagher	06N 07E 23 AAD	09 01 78	Stream	2 cfs (E)	Sixteen Mile Creek in Ringling	500		no					
35	WQB9	Park	04N 08E 10 BCA	09 09 76	Pond		On tributary of Potter Creek on highway 89	640		no					
36	WQB4	Park	03N 09E 05 BAB	09 08 78	River	30 cfs (E)	Shields River 3.5 miles N of Wilsall	260		no					
37	WQB3	Park	03N 09E 07 ADD	09 08 78	Ditch	0.5 cfs (E)	Irrigation ditch 2 miles N of Wilsall	620		no					
38	WQB6	Park	03N 08E 01 DCB	09 09 78	Drain	0.25 cfs (E)	Outlet of Cottonwood Reservoir on highway 89	710		no					
39	WQB5	Park	03N 08E 01 CDB	09 09 78	Reservoir		Cottonwood Reservoir 3.3 miles N of Wilsall	820		no					
40	WQB8	Park	04N 08E 35 DDB	09 09 78	Creek	0.5 cfs (E)	Cottonwood Creek above reservoir on highway 89	1110		no					
41	WQB7	Park	03N 08E 01 DCB	09 09 78	Creek	4 cfs (E)	Potter Creek above outlet of Cottonwood Reservoir	610		no					
42	WQB31	Wheatland	08N12E 09 A	10 16 76	Ditch	5 cfs (E)	Irrigation return	2260		yes					
43	WQB23	Wheatland	08N 13E 28	08 12 76	Creek	0.5 cfs (E)	Alkali Creek at Two Dot	2030		no					
44	WQB24	Wheatland	07N 13E 36	09 12 75	Creek	20 cfs (E)	Elk Creek	450		no					
45	WQB25	Wheatland	07N 14E 31	09 12 75	Reservoir		Labo Reservoir, much algae bloom	500		no					
46	MBMG78	Judith Basin	12N 14E 18 AACD		Well		Domestic well, fairly hard water	360	14	no	4940	29			Hollenbeck
47	WQB31	Lewis & Clark	11N 02W 27	04 23 75	Seep		Saline seep above Hauser Lake	24400		yes					
48	MBMG77	Judith Basin	12N 14E 06 ABBB		Well		Residents use water softener	240	13.6	no	4940				Olson
49	75M1968	Park	05N 10E 26 DBA	06 07 77	Creek	56.4 cfs (M)	Deep Creek at Shields River Road crossing	79	6	yes	6350				
50	76M1970	Park	06N 11E 18 DC	06 07 77	River	10 cfs (E)	Shields River above Turkey Creek	84	9	yes	6650				
51	76M1969	Park	05N 11E 18 CCC	06 07 77	River	103.4 cfs (M)	Shields River below Crandall Creek	91	7	yes	6340				

WHITE SULPHUR SPRINGS

Chemical Analyses

Map ref. no.	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
27	07N	08E	23	AA	09	02	58	Well	11	1	350*					671	84	20	76
28	07N	08E	23	AA	09	02	58	Well	10	2	320*					588	132	20	
29	07N	08E	23	AA	09	10	58	Well	670	95	130*					159		18	2100
30	07N	08E	23	AA	09	02	58	Well	630	100	82*					183		20	1900
32	06N	08E	12	8D	11	04	75	Stream	175	226	480	15				244		182	1670
33	06N	07E	12	CC	09	01	76	Stream	188	180	315	7				610		68	1230
42	08N	12E	09	A	10	16	75	Ditch	216	134	125	9.8				401		30.8	960
47	11N	02W	27		04	23	75	Seep	677	897	16500					653	62	11000	7650
49	05N	10E	26	DBA	06	07	77	Creek	13.4	1.0	1.4	.3	.03	$<.01$	5.7	46		.5	3.6
50	05N	11E	16	DC	06	07	77	River	16.6	1.4	1.5	.5	.1	$<.01$	6.7	55		.2	3.8
51	05N	11E	16	CCC	06	07	77	River	15.9	1.2	1.4	.4	.07	$<.01$	6.3	51		.4	4

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

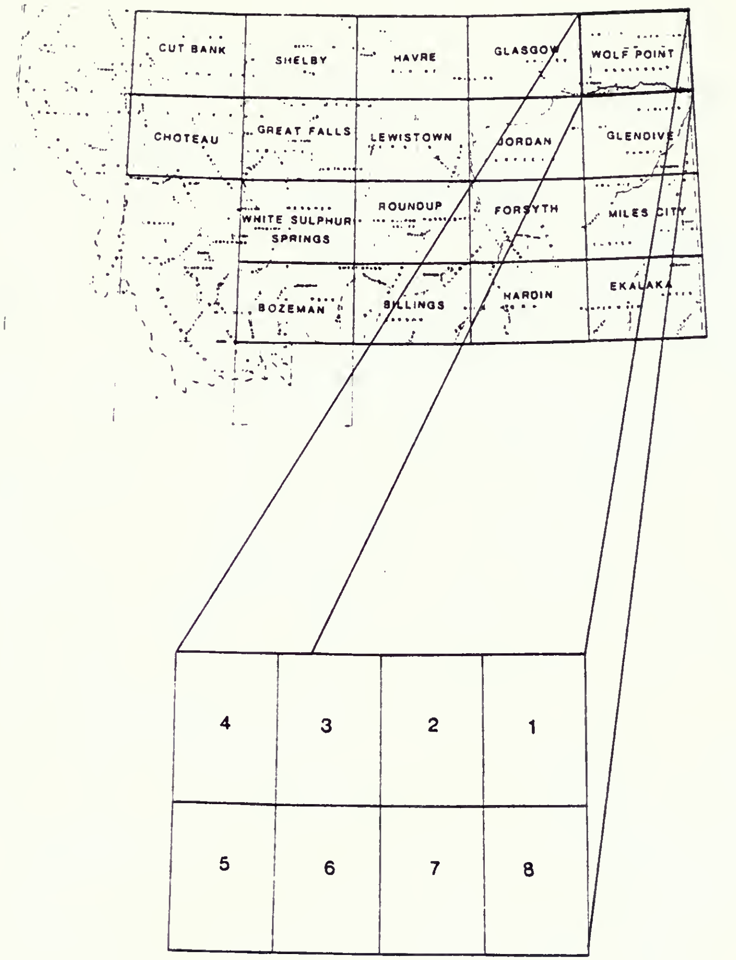
* Values reported as sodium plus potassium

1° x 2° Sheet

of Selected Waters

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
27			8.6				32	690		Unknown		221MRSN	no	58M0004
28			8.4				33	711		Unknown		217LKOT	no	58M0003
29			7.0				2060	130		Unknown		331MDSN	no	58M0007
30			7.0				1980	150		Unknown		320AMSD	no	58M0006
32	.07		7.69		4000	3192	1370	200	5.8	WQB			no	75W2257
33	.02		8.0	22	2874	2289	1211	500	3.9	WQB			no	76W2060
42	.89		8.05	8	2260	1877	1090	329	1.8	WQB			no	75W2101
47	<.01		8.61	15	24400	39440	5380	639	110	WQB			no	75W0547
49	.059	<.1	7.45	5	79	48	38	37	.1	USFS			no	76M1968
50	.113	<.1	7.85	9	94	56	45	46	.1	USFS			no	76M1970
51	.045	<.1	7.81	7	91	54	45	42	.1	USFS			no	76M1969

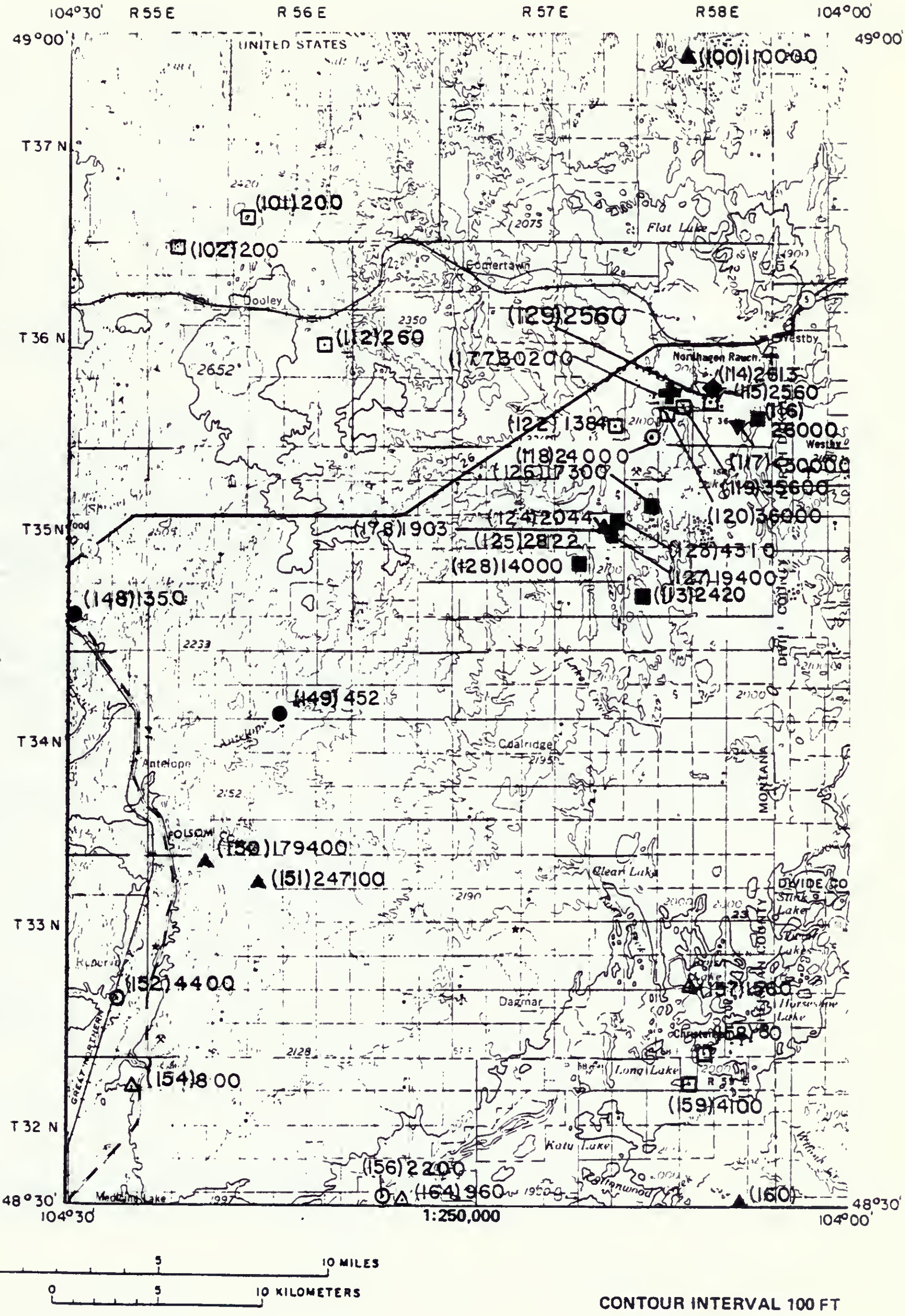
LOCATION BASE MAP



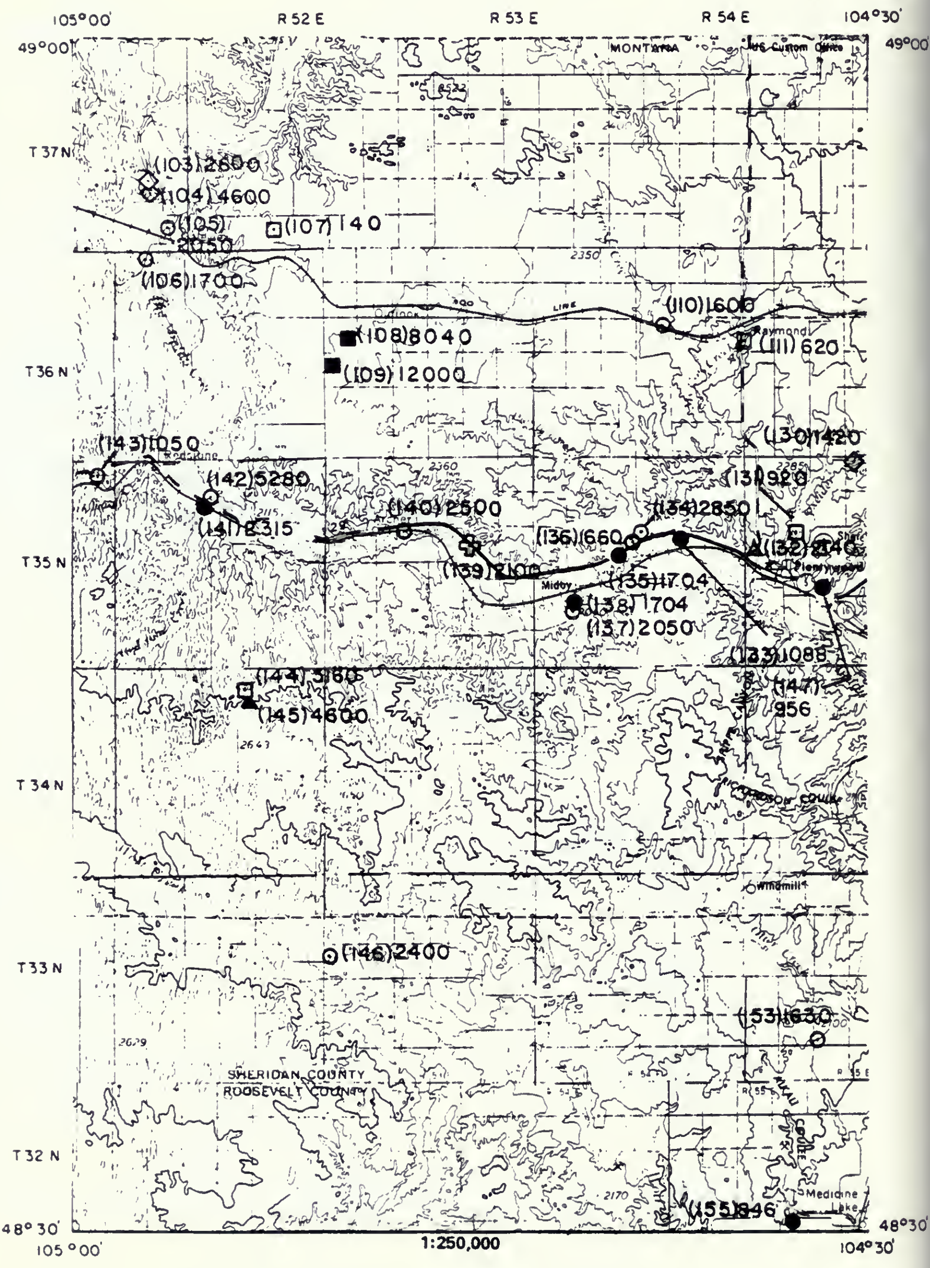
WOLF POINT 1° x 2° SHEET

SPECIFIC CONDUCTANCE SURVEY

WOLF POINT 1

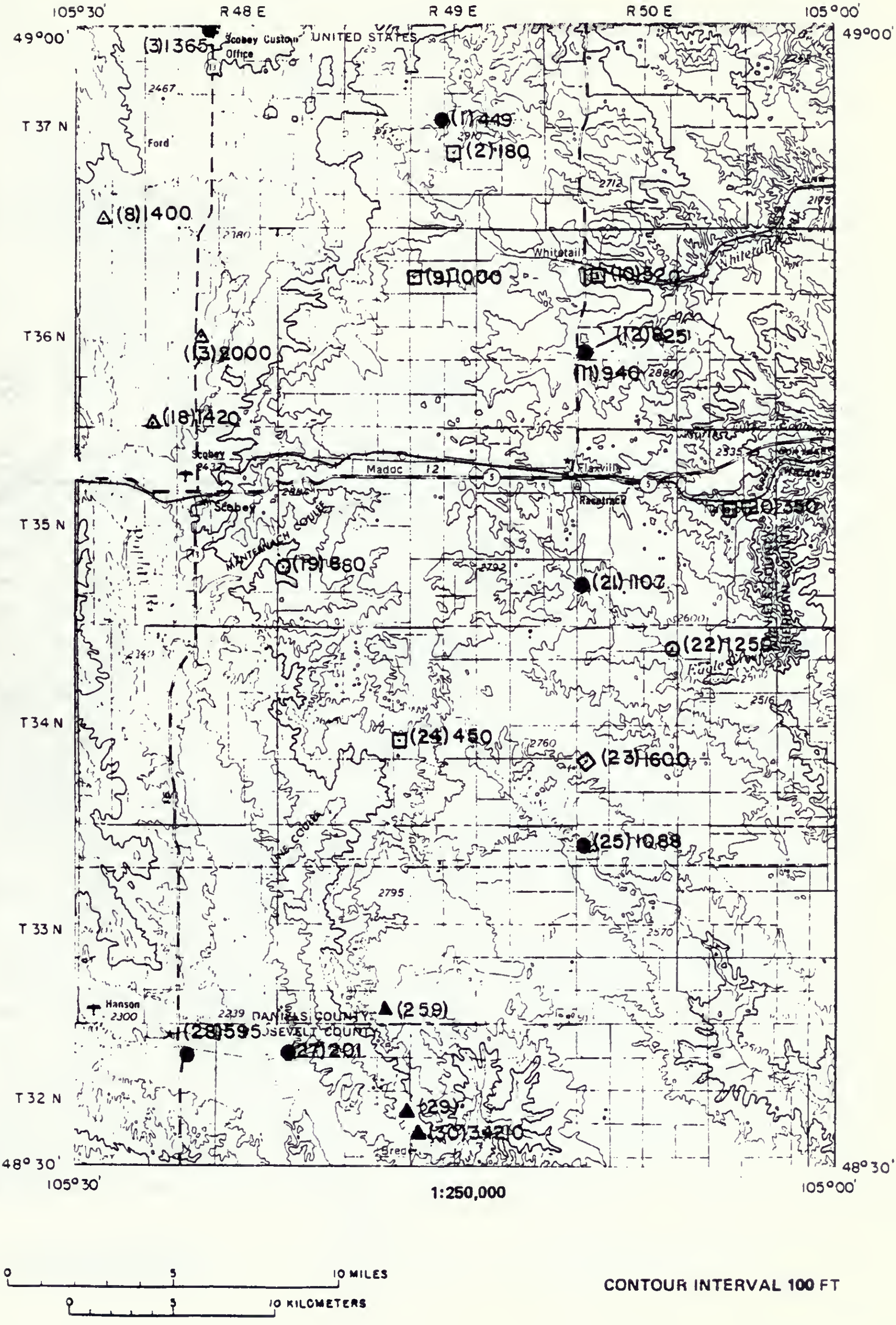


SPECIFIC CONDUCTANCE SURVEY

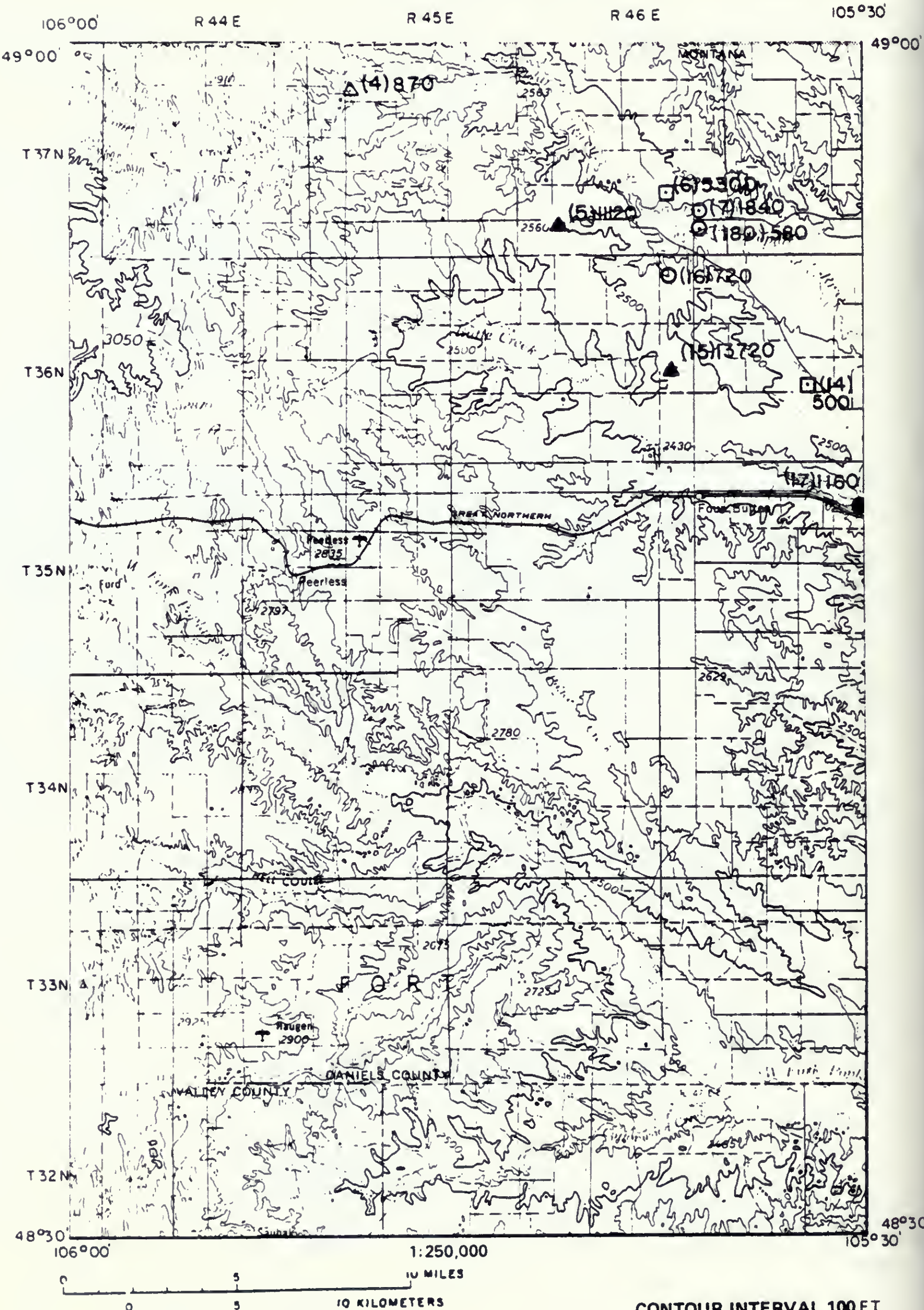


SPECIFIC CONDUCTANCE SURVEY

WOLF POINT 3

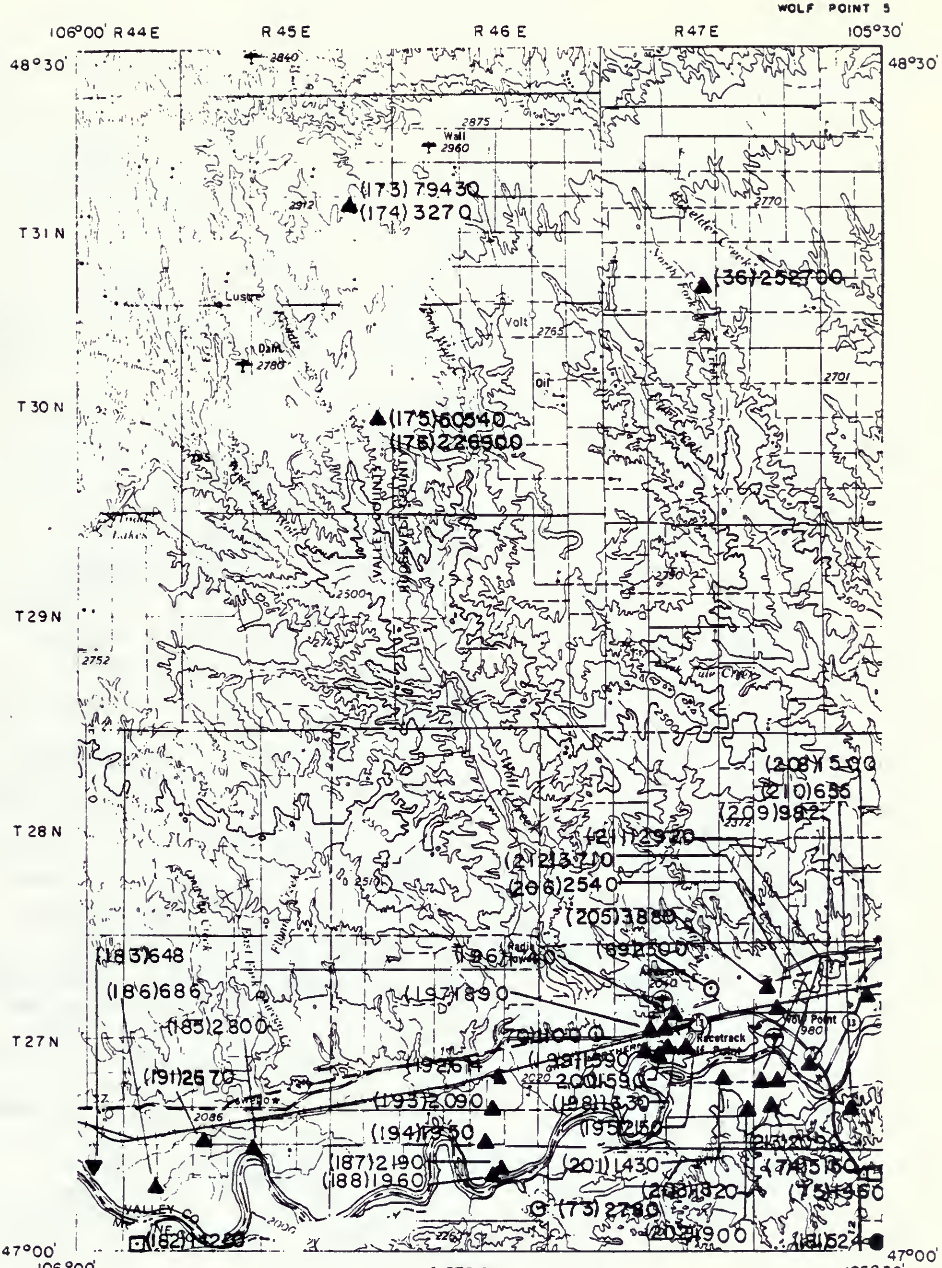


SPECIFIC CONDUCTANCE SURVEY



CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



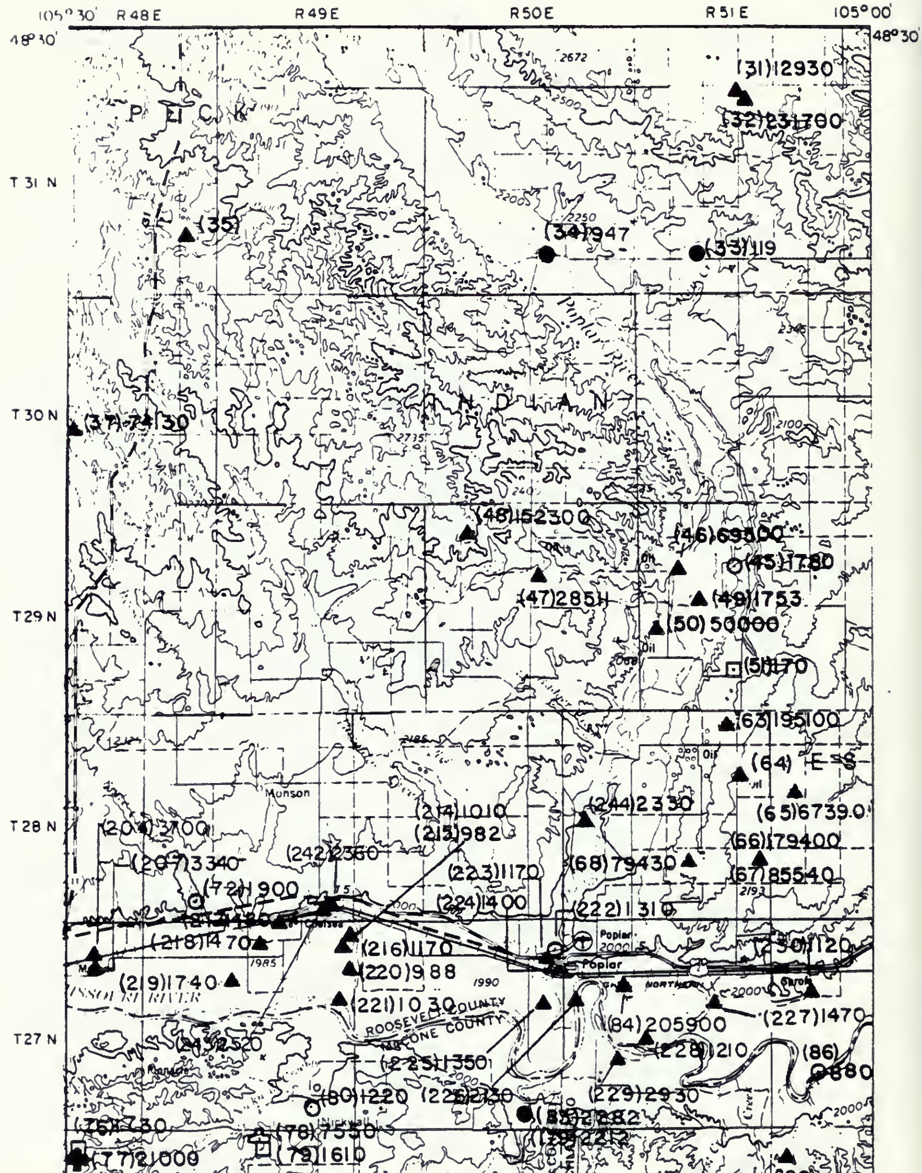
1:250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



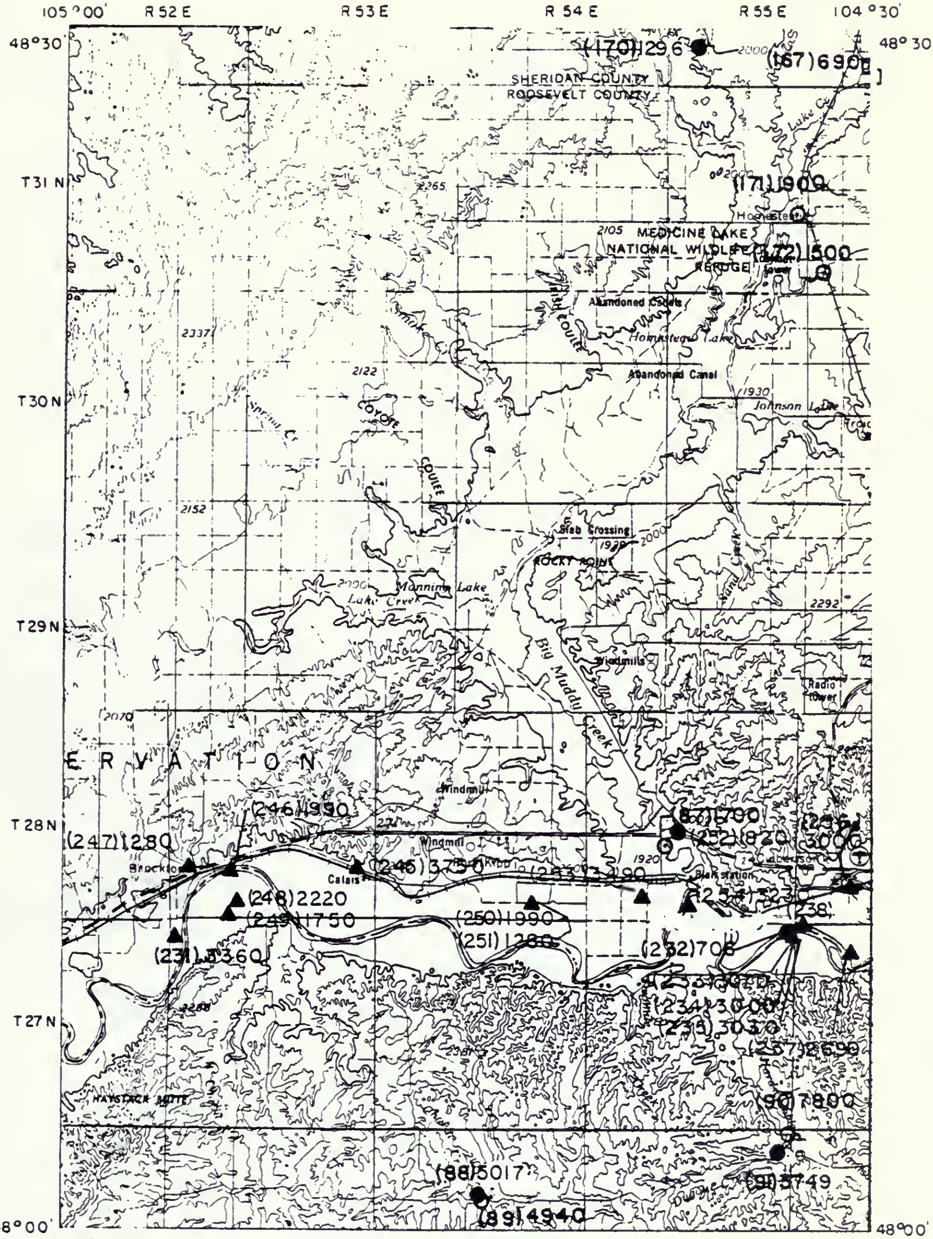
1:250,000

0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY



1:250,000

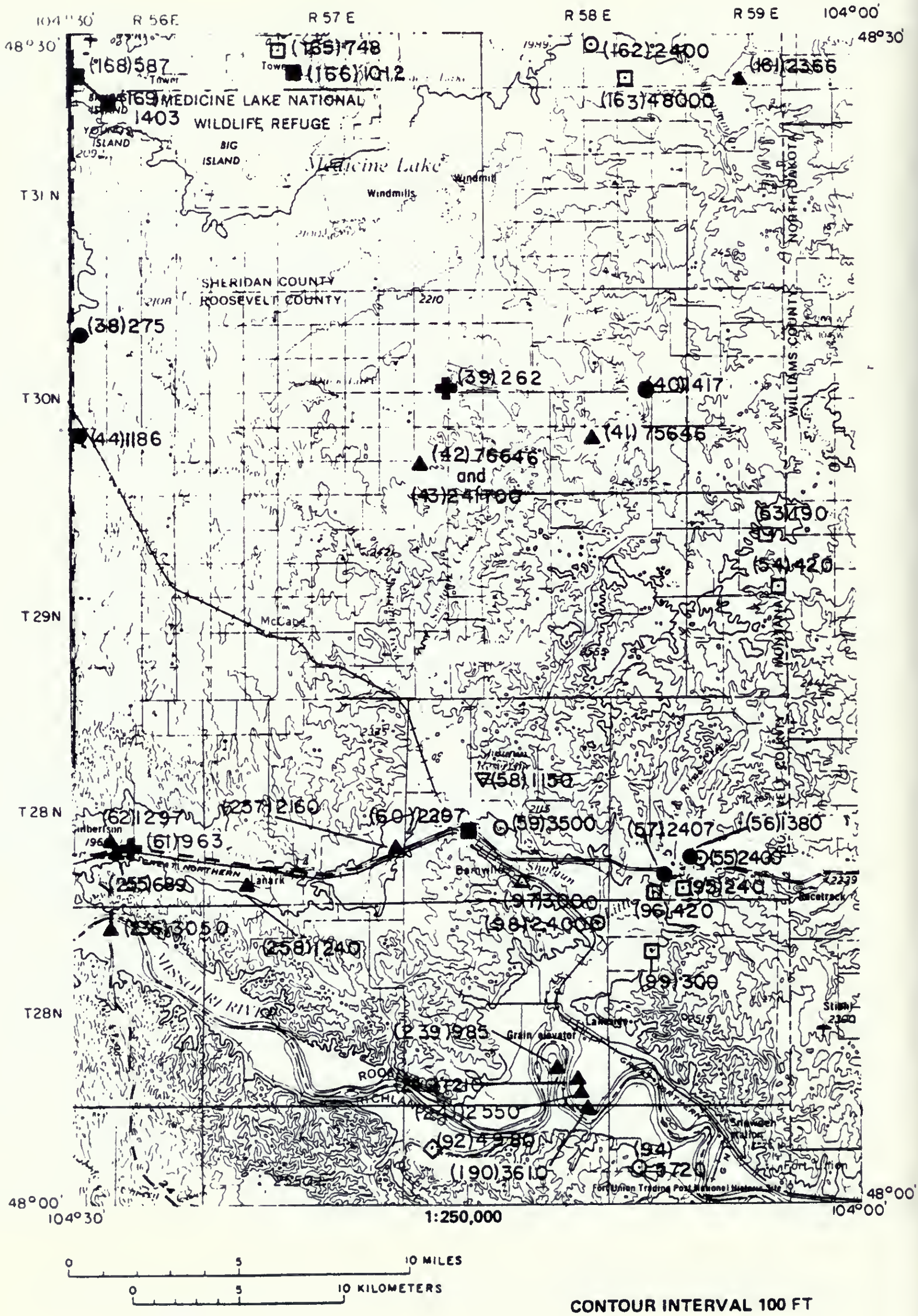
0 5 10 MILES

0 5 10 KILOMETERS

CONTOUR INTERVAL 100 FT

SPECIFIC CONDUCTANCE SURVEY

WOLF POINT 8



CONTOUR INTERVAL 100 FT

WOLF POINT $1^\circ \times 2^\circ$ Sheet

Specific Conductivity Inventory Sheet

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp. °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
1	WQB20	Daniels	37N 49E 16 DD	06 17 76	Creek	2 gpm (E)	Outlet Creek	449		yes					
2	WQB21	Daniels	37N 49E 22 CC	06 17 76	Pond	no flow	Pond in field	180		no					
3	WQB25	Daniels	37N 48E 05 AA	03 17 76	River		East Poplar River at Canadian Border	1365	0.5	yes					
4	WQB5	Daniels	37N 45E 08 BC	08 03 75	Well		At ranch	870		no			125		Richardson
5	70M5002	Daniels	37N 46E 32 BB	07 10 70	Well		10 miles NE of Peerless	11120		yes	2563			211JDRV	
6	WQB18	Daniels	37N 46E 26 B	08 04 75	Pond		About 2 to 3 acres in size on rangeland	5300		no					
7	WQB3	Daniels	37N 46E 25 C	08 03 76	Tank		Cattle tank	1840		no					
8	WQB1	Daniels	37N 47E 35 D	08 03 75	Well			1400		no			120		Dennison, Terry
9	WQB9	Daniels	36N 49E 11 B	08 03 75	Pond		N of Madoc, dryland farming area	1000		no					
10	WQB16	Daniels	36N 50E 10	08 04 75	Reservoir		Whitetail Res., dryland farming area	620		no					
11	WQB15	Daniels	36N 50E 22 C	08 04 75	Creek	no flow	Whitetail Creek	940		no					
12	WQB19	Daniels	36N 50E 22 CCC	06 17 76	Creek	2 cfs (E)	Whitetail Creek S of Whitetail	825		yes					
13	WQB8	Daniels	36N 48E 22 AC	08 03 76	Well		Domestic well	2000		no					Hughes, Frank
14	WQB7	Daniels	36N 47E 23 C	08 03 75	Reservoir		Fish and Game reservoir	500		no					
16	70M5001	Daniels	36N 47E 18 B	07 31 70	Well		12 miles NW of Scobey	13720		yes	2552			211JDRV	
16	WQB6	Daniels	36N 46E 01	08 03 75	Stream	100 gpm (E)	Stream W of Four Buttes	720		no					
17	WQB24	Daniels	35N 47E 12 ADD	06 17 76	Creek	3 cfs (E)	Butte Creek on Daniels Co. highway 248	1160		yes					
18	WQB2	Daniels	36N 48E 33 C	08 03 75	Well			1420		no			125		Lund, Annie
19	WQB10	Daniels	35N 49E 30 BAB	08 03 75	Creek		South Fork of Matternach Coulee	680		no					
20	WQB14	Daniels	35N 51E 17	08 04 75	Reservoir		Hatfield Reservoir at NE edge of Flaxville Bench	350		no					
21	WQB22	Daniels	35N 50E 27 CBB	06 17 76	Creek	1 cfs (E)	Eagle Creek S of Flaxville	1107		yes					
22	WQB13	Daniels	34N 50E 01 D	08 04 76	Creek	no flow	Eagle Creek	1260		no					
23	WQB12	Daniels	34N 50E 27 BAB	08 04 75	Spring	50 gpm (E)	School house spring (seep) on Flaxville Bench	1600		no					
24	WQB11	Daniels	34N 49E 22 AC	08 03 76	Reservoir		Danielson Reservoir, dryland farming area	450		no					
25	WQB23	Daniels	33N 50E 03 CB	06 17 76	Creek	no flow	Smoke Creek	1088		yes					
26	not on map														
27	WQB30	Roosevelt	32N 48E 04 CC	03 18 78	River	25 cfs (E)	Poplar River above West Fork, S of Scobey	201		yes					
28	WQB31	Roosevelt	32N 48E 01 CC	03 17 78	River	100 cfs (E)	Poplar River near Scobey	595		yes					
29	65M0004	Roosevelt	32N 49E 13 DA	10 22 66	Well		1.8 miles NE of Bredette			yes	2423			331CRLS	
30	63M0002	Roosevelt	32N 50E 19 BC	08 03 63	Well		1.2 miles NE of Bredette	34210		yes	2410			337M5NC	

WOLF POINT 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analyses	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
31	57M0004	Roosevelt	31N 51E 04 AA	08 02 67	Well		10 miles SE of Bredette	12930		yes	2650			331CRLS	
32	66M0049	Roosevelt	31N 51E 03 BC	06 03 65	Well		10.6 miles SE of Bredette	231700		yes	2650			331CRLS	
33	WQB29	Roosevelt	31N 51E 29 DCDD	03 16 76	Creek	15 cfs (E)	Lucinda Creek N of Poplar	119	1	yes					
34	WQB28	Roosevelt	31N 50E 27 CD	03 16 78	River		Poplar River below West Fork	947	0.1	yes					
35	66M0029	Roosevelt	31N 48E 25 BC	03 30 66	Well	2 gpm (E)	8.6 miles SW of Bredette			yes	2670			331CRLS	
36	64M0023	Roosevelt	31N 47E 33 AC	11 10 64	Well		4.8 miles E of Volt	252700		yes	2705			337MSNC	
37	57M0008	Roosevelt	30N 48E 20 DD	01 30 57	Well		17 miles N of Poplar	74130		yes	2603			337MSNC	
38	WQB26	Roosevelt	30N 56E 07 BBB	06 16 76	Creek	10 cfs (E)	Lost Creek at Montana highway 16 bridge	275		yes					
39	WQB24	Roosevelt	30N 57E 14 DD	06 16 76	Seep	no flow	At end of paved road	262		yes					
40	WQB23	Roosevelt	30N 58E 14 DCC	06 16 76	Creek	no flow	Sand Creek at bridge	1417		yes					
41	64M0020	Roosevelt	30N 58E 27 BC	03 02 64	Well		11 miles SE of Medicine Lake	75646		yes	2295			320AMSD	
42	63M0008	Roosevelt	30N 57E 35 BB	03 23 63	Well		10 miles SE of Medicine Lake	76646		yes	2285			320AMSD	
43	63M0012	Roosevelt	30N 57E 35 BB	04 08 63	Well		6.8 miles NE of McCabe	241700		yes	2285			331MDSN	
44	WQB25	Roosevelt	30N 56E 30 BBB	06 16 76	Creek	3 cfs (E)	Sheep Creek at Montana highway 16 bridge	1186		yes					
45	WQB9	Roosevelt	29N 51E 09 D	08 07 75	River		Poplar River	1780		no					
46	56M0014	Roosevelt	29N 51E 08 CC	01 24 56	Well		14.6 miles NE of Poplar	69500		yes	2100			331CRLS	
47	56M0013	Roosevelt	29N 50E 15 BB	01 24 56	Well		12 miles N of Poplar	28511		yes	2400			331CRLS	
48	54M0009	Roosevelt	29N 50E 05 CC	10 06 54	Well		13.5 miles NW of Poplar	152300		yes	2620			331CRLS	Lien, Bud
49	WQB27	Roosevelt	29N 51E 17 DD	08 07 76	Well		Old domestic well	1753		yes					
50	WQB14	Roosevelt	29N 51E 18	08 07 75	Well	10 gpm	Flows down coulee	50000		yes				211JDRV	
51	WQB10	Roosevelt	29N 51E 28 D	08 07 75	Reservoir		Badger Creek Reservoir, dryland farming area	170		no					
52	not on map														
53	WQB22	Roosevelt	29N 59E 09 BAA	06 18 78	Pond		0.5 mile W of North Dakota border	190		no					
54	WQB21	Roosevelt	29N 59E 18 DAA	06 16 76	Pond		Along road at North Dakota border	420		no					
55	WQB2	Roosevelt	28N 59E 28 D	08 05 75	Creek	100 gpm (E)	Little Muddy Creek at US highway 2	2400		no					
56	WQB19	Roosevelt	28N 59E 28 DCC	06 18 78	Creek	3 cfs (E)	Little Muddy Creek	1380	18	yes					
57	WQB20	Roosevelt	28N 59E 32 AAC	06 16 76	Creek	1 cfs (E)	Red Bank Creek	2407		yes					
58	WQB18	Roosevelt	28N 58E 18 BBC	06 16 76	Canal	no flow	By Shotgun Reservoir	1150		no					
59	WQB3	Roosevelt	28N 58E 21 D	08 06 75	Creek	0.5 cfs (E)	Shotgun Creek NW of Bainville, salts on bank	3600		no					
60	WQB17	Roosevelt	28N 58E 20 DDD	06 18 76	Pond	no flow	Near railroad crossing	2287	18	yes					

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61	WQ816	Roosevelt	28N 56E 27 ADD	06 16 76	Seep	1 gpm	3 miles E of Culbertson	963	17	yes					
52	WQ84	Roosevelt	28N 56E 27	08 06 75	Well		Lowest point in a six mile area	1297		yes			11		Bowers, Edgar
63	64M0027	Roosevelt	28N 51E 02	09 14 64	Well		8 4 miles NE of Poplar	195100		yes	2111			331CRLS	
64	54M0008	Roosevelt	28N 51E 12 CC	12 09 54	Well	6 gpm (E)	3 miles NW of Brockton			yes	2110			331MDSN	
65	52M0006	Roosevelt	28N 52E 18 AC	05 17 52	Well		5.7 miles N of Sprole	67390		yes	2123			337MSNC	
66	67M0002	Roosevelt	28N 51E 25 AC	01 09 67	Well		4 5 miles N of Sprole	179400		yes	2168			331CRLS	
67	67M0003	Roosevelt	28N 51E 25 AC	01 09 67	Well		4 5 miles N of Sprole	85540		yes	2168			331K88Y	
68	56M0012	Roosevelt	28N 51E 27 AC	01 24 56	Well		4 0 miles NW of Sprole	79430		yes	2155			331HETH	
69	WQ812	Roosevelt	27N 47E 11	08 07 75	Creek	no flow	West Fork Little Wolf Creek at US highway 2	2300		no					
70	WQ813	Roosevelt	27N 47E 17	08 07 75	Creek	1 cfs (E)	Wolf Creek	1100		no					
71	42M0002	Roosevelt	27N 47E 15		Well		Wolf Point			yes	1980			211JDHV	
72	WQ811	Roosevelt	28N 49E 32	08 07 75	Creek	no flow	Tule Creek at US highway 2	1900		no					
73	WQ833	McCone	26N 46E 12 O	08 31 75	Creek	1 cfs (E)	Sand Creek, alkali along sides of creek	2780		no					
74	WQ829	McCone	26N 48E 03 CA	08 31 75	Well	5 cfs (E)	Above large alkali area, water from well had black color	5150		no					
75	WQ828	McCone	26N 48E 03 DB	08 31 75	Pond		Low area surrounded by dryland farming	1460		no					
76	WQ827	McCone	26N 48E 02 CB	08 31 75	Pond		Seeps on two sides	1730		no					
77	WQ826	McCone	26N 48E 02 CA	08 31 75	Seep	5 gpm (E)	Boggy seep in dryland farming area	21000	17	yes					
78	WQ824	McCone	26N 49E 03	08 31 76	Seep		Water trickling from bank, moving to slow to sample	7650		no					
79	WQ823	McCone	26N 49E 03	08 31 75	Reservoir		Below dryland farming area	1610		no					
80	WQ825	McCone	27N 49E 35	08 31 75	Creek		Lard Creek	1220		no					
81	WQ821	McCone	26N 50E 18 BC	08 30 75	Reservoir		Small, shallow reservoir at the foot of Redwater R. bluffs	1800		no					
82	WQ820	McCone	26N 50E 18	08 30 75	Seep		Seep from bluffs along Redwater River	5200		no					
83	WQ822	McCone	27N 50E 35	08 30 75	River		Redwater River at its mouth	2282	15	yes					
84	65M0047	Roosevelt	27N 51E 08 DDD	12 27 65	Well		2 miles E of Poplar	205900		yes	1948			331CRLS	
85	WQ819	Richland	26N 57E 35	10 07 76	Stream	0.6 cfs		2400		no					
86	WQB 30	Richland	27N 52E 29	10 09 75	River		Missouri River at bridge	880		no					
87	WQ88	Roosevelt	28N 65E 21 CC	08 06 75	Creek	2 cfs (E)	Big Muddy Creek at US highway 2 W of Culbertson	1700		no					
88	WQ849	Richland	26N 54E 16 BBB	06 15 76	Creek	2 cfs (E)	Charlie Creek	6017	23	yes					
89	WQ828	Richland	26N 54E 16	10 09 75	Creek	no flow	Charlie Creek, rangeland with some dryland farming	4940		no					
90	WQ827	Richland	26N 55E 01	10 09 75	Creek	<1 cfs (E)	Hardscrabble Creek	7800		no					

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91	WQB50	Richland	26N 55E 01 DBB	06 15 76	Creek	10 cfs (E)	Hardscrabble Creek at bridge	3749	21	yes					
92	WQB18	Richland	26N 58E 07 A	10 07 75	Spring		In Missouri bluffs	4980		no					
93	not on map														
94	WQB17	Richland	26N 59E 07 D	10 07 75	Creek	25 gpm	On flood plain of Missouri River, dryland farming area	5720		no					
95	WQB6	Roosevelt	28N 59E 33	08 06 75	Reservoir		Surrounded by dryland farming	240		no					Panasuk, G.
96	WQB7	Roosevelt	28N 59E 32	08 06 75	Reservoir		Surrounded by range, pond is shallow, eutrophied	420		no					
97	WQB1	Roosevelt	28N 58E 34 BD	08 05 75	Well		Bainville municipal supply, reported laxative effect	3000		no			100		
98	WQB15	Roosevelt	27N 58E 01	08 05 75	Creek	1 cfs	Little Muddy Creek below confluence of Shotgun Creek	2400		no					
99	WQB5	Roosevelt	27N 59E 08	08 08 75	Pond		In coulee E of Bainville, area surrounded by range	300		no					
100	68M0030	Sheridan	37N 58E 05 CA	09 28 68	Well		7.8 miles N of McElroy	110000		yes	2200			331MDSN	
101	WQB18	Sheridan	37N 56E 31 B	08 01 75	Lake		Sharptail Grouse Lake surrounded by dryland farming	200		no					
102	WQB17	Sheridan	36N 56E 06 AA	08 01 75	Pond		2 to 3 acres in size, surrounded by dryland farming	200		no					
103	WQB22	Sheridan	37N 51E 26 AA	08 01 75	Spring		Falcon Spring, salt area below, dryland farming above	2600		no					
104	WQB23	Sheridan	37N 51E 26 A	08 01 75	Spring		Junction of Falcon Spring with Beaver Creek	4600		no					
105	WQB24	Sheridan	37N 51E 36 A	08 01 75	Creek	1 cfs (E)	Beaver Creek at Daleview	2050		no					
106	WQB25	Sheridan	36N 52E 06 AD	08 01 75	Creek	1.5 cfs (E)	Whitetail Creek at Daleview	1700		no					
107	WQB21	Sheridan	37N 52E 33	08 01 75	Reservoir		Dryland farming above	140		no					Leete, Robert
108	WQB32	Sheridan	36N 53E 18 DB	08 02 75	Pit		Outlook oil field discharge pit	8040		yes					
109	WQB31	Sheridan	36N 53E 19 B	08 02 76	Pit		Outlook oil field discharge pit	12000		yes					
110	WQB20	Sheridan	36N 54E 15 AC	08 01 75	Stream	very low	Harrys Creek, rangeland	1600		no					
111	WQB19	Sheridan	36N 55E 18	08 01 75	Reservoir		Raymond Reservoir, stocked by Fish & Game Dept.	620		no					
112	WQB16	Sheridan	36N 56E 13 CC	07 31 76	Pond		Shallow, surrounded by range and dryland farming	260		no					
113	WQB12	Sheridan	35N 58E 28	07 30 75	Pit		Discharge pit	2420		yes					Keldsten, Kennie
114	WQB8	Sheridan	36N 58E 26	07 30 76	Spring	100 gpm	At old well site	2813		yes					Nordhagen, Jim
115	WQB9	Sheridan	36N 58E 26	07 30 76	Spring		Sampled where it emerges from discharge pit	2560		yes					
116	WQB7	Sheridan	36N 58E 36	07 30 75	Lake		Natural lake below state lease	26000		yes					Nordhagen
117	WQB8	Sheridan	36N 58E 36	07 30 76	Trench		Discharge trench on state lease	50000		yes					Nordhagen
118	WQB49	Sheridan	36N 58E 33 O	08 03 75	Stream	25 gpm (E)	Seep along coulee	24000		no					
119	WQB14	Sheridan	36N 58E 27 DA	07 31 75	Pond		Below brine pits near dead tree	35600		yes					
120	WQB50	Sheridan	36N 58E 34 B	08 03 76	Reservoir		Above dead tree	36000		no					

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121	not on map														
122	WQB13	Sheridan	36N 58E 32	07 31 75	Pond		Below tank battery	1384		yes					Helm
123	WQB11	Sheridan	35N 58E 17	07 30 75	Pond		Natural pond	4310		yes					
124	WQB5	Sheridan	35N 58E 17	07 30 75	Well		Domestic well	2044		yes			80		Nelson, Bill
125	WQB4	Sheridan	35N 58E 17	07 30 75	Well		Stock well	2822		yes			120		Nelson, Bill
126	WQB10	Sheridan	35N 58E 09	07 30 75	Pond		Brine pond below tank batteries at state lease	17300		yes					Lagerquist
127	WQB3	Sheridan	35N 58E 17 CA	07 30 75	Pit		Unlined discharge pit N of house	19400		yes					Nelson, Bill
128	WQB2	Sheridan	35N 58E 19	07 30 75	Pit		Emergency discharge pit	14000		yes					
129	WQB67	Sheridan	36N 58E 26	07 30 75	Pond		Well water after it enters a pit	2560		no					
130	WQB15	Sheridan	35N 55E 03 B	07 31 75	Creek	no flow	Box Elder Creek, low rolling country, dryland farming	1420		no					
131	WQB42	Sheridan	35N 55E 17	08 02 76	Reservoir		Box Elder Reservoir at Plentywood	920		no					
132	WQB1	Sheridan	35N 55E 18 C	07 29 75	Well		At Plentywood Campground below reservoir	2140		no			shallow		
133	WQB57	Sheridan	35N 55E 14 BBC	06 17 76	Creek	10 cfs (E)	McCoy Creek at Sheridan County highway 5 bridge	1088		yes					
134	WQB29	Sheridan	35N 54E 15 BB	08 01 75	Creek	0.5 cfs (E)	McCoy Creek	2850		no					
135	WQB58	Sheridan	35N 54E 16 CDA	06 17 76	Creek	10 cfs (E)	Plentywood Creek at Sheridan County highway 5 bridge	1704		yes					
136	WQB28	Sheridan	35N 54E 16 AA	08 01 75	Creek	1 cfs (E)	Plentywood Creek	1660		no					
137	WQB27	Sheridan	35N 54E 29	08 01 75	Creek	no flow	Crazy Horse Creek, surrounded by rangeland	2050		no					
138	WQB59	Sheridan	35N 54E 29 BCA	06 17 76	Creek	20 cfs (E)	Crazy Horse Creek at bridge	1704		yes					
139	WQB60	Sheridan	35N 53E 14 B	06 17 76	Seep		Along Sheridan County highway 5 at culvert	2100		no					
140	WQB26	Sheridan	35N 53E 16	08 01 75	Creek	3 cfs (E)	Big Muddy Creek at Archer	2500		no					
141	WQB61	Sheridan	35N 52E 09 BAD	06 17 76	Creek	3 cfs (E)	Redstone Creek at Sheridan County highway 5 bridge	2315		yes					
142	WQB42	Sheridan	35N 52E 09 A	08 02 75	Creek	no flow	Redstone Creek near Redstone	5280		no					
143	WQB62	Sheridan	35N 51E 01 BDB	06 17 76	Creek	2 cfs (E)	North Fork Big Muddy Creek	1050		no					
144	WQB44	Sheridan	34N 52E 03 DA	08 03 75	Reservoir		Below Flaxville Bench	3160		no					
145	WQB45	Sheridan	34N 52E 03 DD	08 03 75	Well		Stock tank	4600	16	yes			14		Garner, Cecil
146	WQB46	Sheridan	33N 53E 18 BC	08 03 76	Creek	0.5 cfs (E)	Wolf Creek, area surrounded by dryland farming	2400		no					
147	WQB56	Sheridan	35N 55E 21 CDD	06 16 76	Creek	1 cfs (E)	Marron Creek at Montana highway 16 bridge	956		yes					
148	WQB55	Sheridan	36N 55E 27 DDD	06 16 76	Creek	no flow	Ronald Creek at bridge	1360		yes					
149	WQB54	Sheridan	34N 56E 10 DDD	06 16 76	Creek	no flow	Antelope Creek at Culvert	452		yes					
150	57M0011	Sheridan	33N 56E 05 AB	08 30 57	Well		3.8 miles SE of Antelope	179400		yes	2229			337MSNC	

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151	64M0024	Sheridan	33N 56E 03 CC	09 14 64	Well		4.8 miles SE of Antelope	247100		yes	2220			331MDSN	
152	WQB34	Sheridan	33N 55E 25 BB	08 02 75	Creek	5 gpm (E)	Otter Creek, banks lined with salt	4400		no					
153	WQB33	Sheridan	33N 55E 28 CC	08 02 75	Creek	2 cfs (E)	Big Muddy Creek, flood plain has many alkali spots	1630		no					
154	WQB41	Sheridan	32N 56E 05 D	08 02 75	Well		Well used by local residents who have to haul water	800		no					
155	WQB52	Sheridan	32N 55E 27 BAA	08 16 76	Creek	30 cfs (E)	Big Muddy Creek at road	846		yes					
156	WQB35	Sheridan	32N 57E 27 BB	08 02 75	Creek	no flow	Lake Creek before it enters Medicine Lake	2200		no					
157	WQB30	Sheridan	33N 58E 22 D	08 02 75	Well		At Brush Lake Campground	1560		no			shallow		
158	WQB38	Sheridan	33N 58E 35 CC	08 02 75	Pond		Natural pond, dryland farming to its edge	80		no					
159	WQB39	Sheridan	32N 59E 06 CD	08 01 75	Pond		Prairie pond adjacent to alkali flat, much seep nearby	4100		no					
160	60M0011	Sheridan	32N 59E 29 A	10 26 60	Well	3 gpm (E)	8.3 miles SE of Dagmar			yes	2070			337MSNC	
161	68M0004	Sheridan	32N 59E 32 CD	03 20 56	Well		10 miles E of Medicine Lake	2366		yes	2145			217MDDY	
162	WQB36	Sheridan	32N 58E 27 C	08 02 75	Creek	<1 cfs (E)	Lake Creek	2400		no					
163	WQB37	Sheridan	32N 58E 35 C	08 02 75	Pond		Natural pond, dryland farming to its edge	48000		no					
164	WQB40	Sheridan	32N 57E 27 A	08 01 75	Well		In marshy bottom near wildlife refuge	960		no			shallow		
165	WQB65	Sheridan	32N 57E 30	04 09 78	Lake		Medicine Lake	748		yes					
166	WQB66	Sheridan	32N 57E 31 A	05 06 76	Lake		Medicine Lake	1012		yes					
167	WQB63	Sheridan	32N 55E 36	04 09 76	Lake		Medicine Lake	690		yes					
168	WQB51	Sheridan	32N 56E 31 CCB	06 18 76	Lake		Medicine Lake at W end	587		yes					
169	WQB64	Sheridan	32N 56E 31 CCB	06 16 76	Lake		Medicine Lake	1403		yes					
170	WQB53	Sheridan	32N 55E 30 DDD	06 16 76	Creek	16 cfs (E)	Wolf Creek at bridge	1296		yes					
171	WQB47	Sheridan	31N 55E 22 DD	08 03 75	Creek	2 cfs (E)	Big Muddy Creek at Homestead Lake	1900		no					
172	WQB48	Sheridan	31N 55E 35	08 03 75	Creek		Lost Creek as it enters Homestead Lake	1500		no					
173	57M0010	Valley	31N 45E 23 AA	01 31 57	Well		4.8 miles NE of Lustre	79430		yes	2890			337MSNC	
174	57M0009	Valley	31N 45E 23 AA	01 01 57	Well		6.0 miles NE of Lustre	32700		yes	2890			337MSNC	
175	56M0005	Valley	30N 45E 24 AD	03 02 56	Well		8 miles SE of Todd Lake	50540		yes	2745			224PIPR	
176	56M0016	Valley	30N 45E 24 AD	03 16 56	Well		10 miles SE of Lustre	226900		yes	2745			331CRLS	
177	WQB9A	Sheridan	36N 58E 27	07 30 75	Seep		Coulee below Bergland lease	30200		yes					
178	76M1648	Sheridan	35N 58E 17 ADD	03 07 77	Well		Nelson farm 7 miles SW of Westby	1803		yes	2160			125TGRV	Nelson
179	EPA RW1	McCone	27N 50E 35	07 27 76	River		Redwater River	2212	20	yes					
180	WQB4	Daniels	37N 46E 36 B	08 03 76	Creek	<1 cfs	Coal Creek area surrounded by dryland farming	580		no					

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181	WQ846	McCone	26N 48E 15 CB	03 16 76	Creek	1.1 cfs (M)	Nickwall Creek near Wolf Point	524		yes					
182	WQ834	McCone	26N 45E 19	08 31 75	Pond		Below Missouri bluffs, used for stock	14200		no					
183	63M0025	McCone	26N 44E 01 CCB	09 06 63	Canal	100 cfs (E)	3 miles SW of Wolf Point	648	17.2	yes	2050				
184	63M0056	McCone	26N 44E 10 BCC	09 05 63	Well		2.5 miles S of Frazer	1150		yes	2009		18	110ALVM	
185	63M0057	McCone	26N 45E 03 AAA	09 06 63	Well		1 mile S of Oswego	2800	16.1	yes	2010		48	110ALVM	
186	63M0058	McCone	26N 45E 07 ADA	09 09 63	Well		5 miles S of Oswego	686	13.3	yes	2005		63	110ALVM	
187	63M0053	McCone	26N 46E 02 DBB	11 06 63	Well		7 miles SW of Wolf Point	2190		yes	1995		106	110ALVM	
188	63M0026	McCone	26N 46E 02 DCD	10 22 63	Well		1 mile SW of Wolf Point	1960	10.6	yes	2250		106	110ALVM	
189	64M0021	Richland	26N 52E 06 CD	07 28 64	Well		9 miles SE of Poplar			yes	2104			331MDSN	
190	64M0054	McCone	26N 58E 01 BAD	04 15 64	Well		4 miles NW of Nohly Cemetery	3610	8.9	yes	1940		90	110ALVM	
191	47M0057	Valley	27N 45E 33 CDD	10 09 47	Well		2.5 miles SW of Oswego	2670	7.8	yes	2010		21	110ALVM	
192	63M0060	Roosevelt	27N 46E 26 ABA	11 17 63	Well		6 miles SW of Wolf Point	614	8.3	yes	2000		42	110ALVM	
193	63M0061	Roosevelt	27N 46E 26 DDC	10 08 63	Well		6 miles SW of Wolf Point	2090		yes	1995		80	110ALVM	
194	63M0062	Roosevelt	27N 46E 35 DCD	10 22 63	Well		8 miles SW of Wolf Point	1950	9.5	yes	1995		73	110ALVM	
195	63M0052	Roosevelt	27N 47E 14 CC	10 18 63	Well		1 mile E of Wolf Point	2150		yes	1980		106	110ALVM	
196	47M0054	Roosevelt	27N 47E 15 AC	10 10 17	Well		Wolf Point	1740	8.9	yes	1985		93	110ALVM	
197	47M0055	Roosevelt	27N 47E 15 CB	10 15 47	Well		Wolf Point	1890	10.6	yes	1985		100	110ALVM	
198	64M0045	Roosevelt	27N 47E 15 DCC	10 16 64	Well		Wolf Point	1630	7.8	yes	1985		110	110ALVM	
199	64M0046	Roosevelt	27N 47E 21 AAD	10 16 64	Well		Wolf Point	1590	7.8	yes	1980		100	110ALVM	
200	64M0047	Roosevelt	27N 47E 22 BBD	10 16 64	Well		Wolf Point	1590	8.3	yes	1980		94	110ALVM	
201	64M0039	Roosevelt	27N 47E 24 CCC	07 23 64	Well		2 miles SW of Wolf Point airport	1430	8.5	yes	1986		54	110ALVM	
202	63M0043	Roosevelt	27N 47E 25 DD	09 05 83	Well		Pleasant Valley community hall	1900	16.1	yes	1888		20	110ALVM	
203	47M0051	Roosevelt	27N 47E 25 DD	10 10 47	Well		Pleasant Valley community hall	1820	8.3	yes	1988		20	110ALVM	
204	64M0053	McCone	27N 48E 02 DCA	10 15 64	Well		1.5 miles E of Macon	3700	7.2	yes	2000	21.2	61	110ALVM	
205	63M0044	McCone	27N 48E 07 BDB	09 07 63	Well		0.5 mile N Wolf Point International Airport	3880	7.8	yes	1991		48	110ALVM	
206	63M0055	McCone	27N 48E 07 DCD	09 07 63	Well	500 gpm (E)	0.5 mile N Wolf Point International Airport	2540	7.2	yes	1980	19.8	68	110ALVM	
207	64M0052	McCone	27N 48E 11 ACB	09 07 64	Well	680 gpm (E)	1.5 miles E of Macon	3340	7.2	yes	2000	20.0	62	110ALVM	
208	47M0052	McCone	27N 48E 10 CB	10 10 47	Well		0.7 mile S of Macon	1500	7.8	yes	1980		36	110ALVM	
209	63M0054	McCone	27N 48E 20 DBA	09 06 63	Well	1000 gpm (E)	0.7 mile N of Lewis and Clark Park	982		yes	1980	11.6	65	110ALVM	
210	63M0036	Roosevelt	27N 48E 28 D	09 06 63	Canal	80 cfs (E)	Wolf Point	655	20.6	yes	2000				

WOLF POINT 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
211	64M0050	McCone	27N 48E 30 ABA	07 23 64	Well	450 gpm (E)	1.6 miles S of Wolf Point International Airport	2920	8.9	yes	1980	16.5	60	110ALVM	
212	64M0049	McCone	27N 48E 30 BBA	10 14 64	Well	550 gpm (E)	1 mile N Pleasant Valley Community Hall	3710		yes	1480	19.1	63	110ALVM	
213	64M0048	McCune	27N 48E 30 CAD	08 29 64	Well	1100 gpm (E)	0.2 mile N Pleasant Valley Community Hall	2090	8.3	yes	1980	23.8	64	110ALVM	
214	63M0045	Roosevelt	27N 49E 01 ADA	10 10 63	Well		4 miles N of Nickwall	1010	8.9	yes	1960		97	110ALVM	
215	63M0046	Roosevelt	27N 49E 01 ADA	10 10 63	Well		4 miles N of Nickwall	982	8.3	yes	1960		97	110ALVM	
218	63M0047	Roosevelt	27N 49E 01 DAD	10 28 63	Well		4 miles N of Nickwall	1170	8.3	yes	1960		85	110ALVM	
217	64M0031	Roosevelt	27N 49E 03 AAB	09 02 64	Well	820 cpm (M)	Chelsee	1480	7.8	yes	1985	29.0	105	110ALVM	
218	47M0053	Roosevelt	27N 49E 03 CA	10 14 47	Well		8 miles NW of Nickwall	1470	8.3	yes	1975		60	110ALVM	
219	63M0048	Roosevelt	27N 49E 09 DBC	09 07 83	Well		8.5 miles NW of Nickwell	1740		yes	1970		90	110ALVM	
220	63M0049	Roosevelt	27N 49E 12 ADD	10 31 63	Well		5 miles NW of Nickwall	988	8.3	yes	1965		98	110ALVM	
221	83M0050	Roosevelt	27N 49E 13 AAC	11 05 63	Well		4 miles NW of Nickwall	1030	8.9	yes	1965		86	110ALVM	
222	63M0037	Roosevelt	27N 50E 01 D	09 07 63	Stream	5 cfs (E)	Popler River near Poplar	1310	22.8	yes	2000				
223	64M0042	Roosevelt	27N 50E 12 AB	10 15 64	Well		Poplar	1170		yes	1960		99		
224	64M0041	Roosevelt	27N 50E 12 ADD	10 15 64	Well		Poplar	1400	10.6	yes	1960		96	110ALVM	
225	63M0051	Roosevelt	27N 50E 13 BDD	09 07 63	Well		1 mile S of Poplar	1350	13.9	yes	1955		65	110ALVM	
226	64M0044	Roosevelt	27N 51E 18 BC	10 07 64	Well		1.5 miles S of Poplar	2130	8.9	yes	1952		73	110ALVM	
227	64M0043	Roosevelt	27N 51E 14 BDC	10 07 64	Well		5 miles SE of Poplar	1470	8.9	yes	1990		30	110ALVM	
228	64M0040	Roosevelt	27N 51E 21 BBA	10 07 64	Well		3 miles SE of Poplar	1210	12.2	yes	1951		20	110ALVM	
229	83M0036	Roosevelt	27N 51E 29 ABB	09 07 63	Well		0.5 mile S of Poplar	2930	13.8	yes	2000		77	110ALVM	
230	83M0041	Roosevelt	27N 52E 17 BB	09 09 83	Well		7 miles NW of Haysteck Butte	1120	11.7	yes	1980		75	110ALVM	
231	64M0035	Richland	27N 63E 06 BCD	10 08 64	Well		1.5 miles S of Brockton	3360	8.8	yes	1934			110ALUM	
232	64M0033	Richland	27N 55E 01 AA	05 12 64	Stream		Missouri River 6 miles E of Popler	706		yes	2000				
233	64M0036	Richland	27N 55E 01 AAD	04 30 64	Well		3.3 miles S of Culbertson	3070	8.9	yes	1900		109	110ALVM	
234	64M0037	Richland	27N 55E 01 AAD	04 30 64	Well		3.3 miles S of Culbertson	3000	9.5	yes	1900		36	110ALVM	
235	84M0028	Richland	27N 55E 01 AAD	05 14 64	Well	700 gpm (M)		3030	9.5	yes			126	110ALVM	
236	64M0038	Richland	27N 56E 03 CAB	05 05 64	Well		3.6 miles S of Culbertson	3050	8.3	yes	1911		90	110ALVM	
237	63M0042	Richland	27N 56E 05 CDA	11 14 63	Well		7 miles W of Culbertson	2690	8.3	yes	1900		157	110ALVM	
238	62M0017	Richland	27N 56E 06 BBB	10 03 62	Well		5 of Culbertson			yes	2000		115	110ALVM	
239	63M0040	Roosevelt	27N 58E 35 AAB	09 20 63	Well		21 miles N of Fairview	985		yes	1890		56	110ALVM	
240	63M0027	Roosevelt	27N 58E 36 BCD	09 23 63	Well		4 miles SE of Culbertson	1210		yes	2200		80	110ALVM	

WOLF POINT 1° x 2° Sheet (Con't.)

Specific Conductivity Inventory Sheet (Con't.)

Map ref. no.	Field number	County	Location T R Sec Tract	Collection date Mo Day Yr	Source	Flow or yield E = estimated M = measured	Site description	Specific conductivity at 25°C	Field temp °C	Lab analysis	Altitude (ft.)	Static water level (ft.)	Well depth (ft.)	Aquifer code	Owner's name
241	63M0028	Roosevelt	27N 58E 36 CDB	09 09 63	Well		4 miles SE of Culbertson	2550	9.5	yes	2200		118	110ALVM	
242	63M0024	Richland	28N 49E 36 CAA	11 06 63	Well		In Chelsea	2360	8.9	yes	2000		68	110ALVM	
243	64M0027	Richland	28N 49E 36 CBA	04 30 64	Well		In Chelsee	2520	7.8	yes	2000		55	110ALVM	
244	63M0020	Richland	28N 51E 19 ABB	09 07 63	Well		0.7 mile N of Poplar	2330	8.3	yes	2100		18	110ALVM	
245	47M0048	Richland	28N 53E 25 DB	10 14 47	Well		2 miles W of Culbertson	3750	8.3	yes	2170		90	110CLUM	
246	63M0029	Richland	28N 53E 29 DAC	10 05 63	Well		3 miles W of Culbertson	1990	11.1	yes	2175		82	110ALVM	
247	64M0032	Richland	28N 53E 30 DA	10 08 64	Well		3 miles W of Culbertson	1280		yes	2180		106	112DRFT	
248	63M0031	Richland	28N 53E 32 ADB	10 24 63	Well		3 miles W of Culbertson	2220	9.5	yes	2250		88	110ALVM	
249	63M0030	Richland	28N 53E 32 DCD	10 07 63	Well		3 miles W of Culbertson	1750	10.6	yes	2250		100	110ALVM	
250	63M0032	Richland	28N 54E 35 CAA	09 09 63	Well		1.4 miles W of Culbertson	1990		yes	2000		30	110ALVM	
251	63M0033	Richland	28N 54E 35 CAA	09 09 63	Well		1.4 miles W of Culbertson	1280	11.7	yes	2000		78	110ALVM	
252	63M0039	Roosevelt	28N 55E 21 ACC	09 10 63	Stream		Big Muddy Creek, 6 miles W of Culbertson	1820	25.0	yes	2000				
253	63M0034	Richland	28N 55E 32 AC	09 09 63	Well		0.7 mile W of Culbertson	3490		yes	1930		100	110ALVM	
254	47M0049	Richland	28N 55E 33 DAD	10 13 47	Well		0.7 mile W of Culbertson	3230	7.2	yes	1920		15	110ALVM	
255	63M0035	Richland	28N 56E 27 BD	09 10 63	Well		Culbertson	689	9.5	yes	1960		16	110ALVM	
256	64M0030	Richland	28N 56E 29 CD	10 12 64	Well	650 gpm	0.5 mile N of Culbertson	3000	7.8	yes	2430	29.7	80	110ALVM	
257	64M0029	Richland	28N 57E 25 ACA	10 12 64	Well	800 gpm (M)	2 miles W of Culbertson	2160	8.3	yes	2200	47.9	147	112DRFT	
258	47M0050	Richland	28N 57E 32 DB	10 13 47	Well		1 mile E of Culbertson	1240	7.8	yes	2000		19	110ALVM	
259	56M0017	Daniels	33N 49E 34 CB	05 16 56	Well		4.3 miles N of Bredette			yes	2684			337M5NC	

WOLF POINT

Chemical Analyses

Map ref no.	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
1	37N 49E 16 DD	06	17	76	Creek	70	3.6	2	14.8	2.1	.05		214		7	13.1
3	37N 48E 05 AA	03	17	76	River	65	33	200	7.3	.45	.11		565		23	220
5	37N 46E 32 BB	07	10	70	Well	900	110	1400*					890		1600	2800
12	36N 50E 22 CCC	06	17	76	Creek	72	42.1	28	6.3	.24	.06		453		3.1	39
15	36N 47E 19 B	07	31	70	Well	88	24	3000*					195		4800	60
17	35N 47E 12 ADD	06	17	76	Creek	41.3	22.5	175	8.5	3.6	.16		477		8	180
21	35N 50E 27 CBB	06	17	76	Creek	51	75	68	7.5	.19	.03		493		7	164
25	33N 50E 03 CB	06	17	76	Creek	71	52	64	10.2	.23	.04		405		13.9	185
27	32N 49E 04 CC	03	16	76	River	27.3	2.9	4	9.2				65		22	11
28	32N 48E 01 CC	03	17	76	River	20.4	11.9	82	7.9				154		4.6	150
29	32N 49E 13 DA	10	22	55	Well	840	210	16000*					294		24000	2900
30	32N 50E 19 BC	08	03	53	Well	540	95	8400*					231		11000	3800
31	31N 51E 04 AA	08	02	67	Well	1400	200	39000	580				378		61000	2500
32	31N 51E 03 BC	06	03	65	Well	2200	240	110000	1400				146		120000	3000
33	31N 51E 29 DCDD	03	16	76	Creek	16.8	4.4	1	8.1				57		1.5	15
34	31N 50E 27 CD	03	16	76	River	32.4	21.4	145	8.3	.55	.04		434		8.2	122
35	31N 48E 25 BC	03	30	66	Well	620	130						279		10000	2400
36	31N 47E 33 AC	11	10	64	Well		300	110000	600				146		170000	3700
37	30N 48E 20 DD	01	30	57	Well	880	130	21000*					551	85	31000	4400
38	30N 56E 07 BBB	06	16	76	Creek	35.7	6.1	4.1	9.7	2.1	.14		117		1.7	35
39	30N 57E 14 DD	06	16	76	Seep	42.1	4.4	1.7	13	1.2	.14		152		1.7	13
40	30N 58E 14 DCC	06	16	76	Creek	74	49.8	167	14	.10	.28		570		12	280
41	30N 58E 27 BC	03	02	64	Well	4500	340						610		170000	1800
42	30N 57E 25 BB	03	23	63	Well			90000*					195		140000	1900
43	30N 57E 35 BB	04	08	63	Well	7800	950	84000	3000				195		150000	540
44	30N 56E 30 BBB	06	16	76	Creek	90	66	69	10.6	1.8	.09		167		12.2	484
46	29N 51E 08 CC	01	24	56	Well	1200	300	20000*					145		33000	120
47	29N 50E 15 BB	01	24	56	Well	260	110	6800*					205		9000	3000
48	29N 50E 05 CC	10	06	54	Well	5300	810	75000*					121		130000	2100
49	29N 51E 17 DD	08	07	75	Well			95					577		103	190
50	29N 51E 19	08	07	75	Well			70000							12250	4200
56	28N 59E 28 DCC	06	16	76	Creek	44.1	20.6	249	9	.46	.02		518		11	300
57	28N 59E 32 AAC	06	16	76	Creek	53	64	500	15	.19	.12		750		10	860
60	28N 58E 20 DDD	06	16	76	Pond	28.1	70	502	13	.03	.01		732		9.5	793
61	28N 56E 27 ADD	06	16	76	Seep	72	13.6	111	15	.19	.08		287		6.8	250
62	28N 56E 27	08	06	75	Well			85					414		6	380
63	28N 51E 02	09	14	64	Well	970	120	73000	500				207		110000	2200
64	28N 51E 12 CC	12	09	54	Well	1000	140	77000*					239		120000	2600
65	28N 52E 18 AC	05	17	52	Well	890	130	18000*					262		28000	2400
66	28N 51E 25 AC	01	09	67	Well	1000	150	63000	500				378		98000	1500

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1" x 2" Sheet

of Selected Waters

Map ref. no.	Nitrate (N)	Fluo-ride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
1	1.7	.05	7.6		449	218	190	176	.1	WQB			yes	76W1092
3	1.9	22	7.94	.5	1366	829	300	463	5	WQB			yes	76W0499
5			7.0				2700	730		Unknown		211JDRV	no	70M5002
12	.13	.42			825	413	352	372	.6	WQB			yes	76W1091
15			6.9				319	160		Unknown		211JDRV	no	70M5001
17	.12	.46	8.2		1160	670	196	391	5.4	WQB			yes	76W1095
21	.17	.42			1107	616	436	404	1.4	WQB			yes	76W1093
25	.03	.19	7.85		1088	595	391	332	1.4	WQB			yes	76W1094
27	.51	.05	7.55		201		80	53	.2	WQB			no	76W0495
28	.31	.08	7.42		595		100	126	3.6	WQB			no	76W0500
29							2960	241		Unknown		331CRLS	no	55M0004
30			6.4				1740	189		Unknown		337MSNC	no	53M0002
31			7.7			104900	4320	310	258	Unknown		331CRLS	no	. 67M0004
32			8.4			285500	6480	120	595	Unknown		331CRLS	no	65M0049
33	.51	.08	7.19	1	119		60	47	.1	WQB			no	76W0498
34	.07	23	7.96	.1	. 947	772	169	358	4	WQB			yes	76W0497
35			7.5				2080	229		Unknown		331CRLS	no	66M0029
36			7.0				1240	120	1382	Unknown		337MSNC	no	64M0023
37			8.9				2730	594		Unknown		337MSNC	no	57M0008
38	.11	.06	7.6		275	150	114	96	.2	WQB			yes	76W1080
39	.04	.06	7.6		262	151	123	125	.1	WQB			yes	76W1078
40	.01		8.0		1417	877	389	468	3.7	WQB			yes	76W1077
41			7.7				12600	500		Unknown		320AMSO	no	64M0020
47			7.6					160		Unknown		320AMSD	no	63M0008
43			6.5			243400	23400	160	239	Unknown		331MDSN	no	63M0012
44	.44	.08	7.7		1186	814	496	137	1.3	WQB			yes	76W1079
46			6.5				4230	119		Unknown		331CRLS	no	58M0014
47			8.5				1100	168		Unknown		331CRLS	no	56M0013
48			5.7				16600	99		Unknown		331CRLS	no	54M0009
49			7.97		1753			473		WQB			no	75W1443
50			3.98		50000					WQB			no	75W1442
56	.05	.17	8.2	18	1380	889	195	425	7.8	WQB			yes	76W1075
57	.03	.27	8.0		2407	1872	398	615	10.9	WQB			yes	76W1076
60	.05	.21	7.7	19	2297	1776	357	600	11.6	WQB			yes	76W1074
61	.13	.07	7.6	17	963	810	235	235	3.2	WQB			yes	76W1073
62			7.84		1297			339		WQB			no	75W1440
63			8.1			186900	2920	170	588	Unknown		331CRLS	no	64M0022
64							3070	196		Unknown		331MOSN	no	54M0008
65			7.4				2760	215		Unknown		337MSNC	no	52M0006
66			6.8			164300	3110	310	491	Unknown		331CRLS	no	67M0002

WOLF POINT

Chemical Analyses

Map ref no	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
67	28N 51E 25 AC	01	09	67	Well	820	85	22000	650				439		35000	2200
68	28N 51E 27 AC	01	24	56	Well	1400	230	22000*					475		36000	1400
71	27N 47E 15				Well	18		1900*					980		2400	
77	26N 48E 02 CA	08	31	75	Seep	389	634	5800	19.3				935		137	14400
83	27N 50E 35	08	30	75	River	55	54	424	8.5	< .01			504	8	14	815
84	27N 51E 08 DDD	12	27	65	Well	8900	1400	68000*					37		120000	670
88	26N 54E 15 BBB	06	15	76	Creek	63	204	1028	11	< .01	.06		506		21	2700
91	26N 55E 01 DBB	06	15	76	Creek	124	178	566	15	01	.03		362		10	1926
100	37N 58E 05 CA	09	28	66	Well	5000	890	110000*					173		180000	770
108	36N 53E 18 DB	08	02	75	Pit			1500					146		2875	770
109	36N 53E 19 B	08	02	75	Pit			2500					194		3850	55
113	35N 58E 28	07	30	75	Pit			422					294		750	11
114	36N 58E 26	07	30	75	Spring			525					1027		24	580
115	36N 58E 26	07	30	75	Spring			525					972		.5	580
116	36N 58E 36	07	30	75	Lake			8950					2045	778	850	12900
117	36N 58E 36	07	30	75	Trench			29200					1298		4600	1200
119	36N 58E 27 DA	07	31	75	Pond			8500					152		1200	300
122	36N 58E 32	07	31	75	Pond			278					242	42	257	15
123	35N 58E 17	07	30	75	Pond			700					329	2	721	1100
124	35N 58E 17	07	30	75	Well			198					748		7	530
125	35N 58E 17	07	30	75	Well			338					917		15	920
126	35N 58E 09	07	30	75	Pond			3600					326		6840	20
127	35N 58E 17 CA	07	30	75	Pit			3800					117		7450	160
128	35N 58E 19	07	30	75	Pit			4000					119		5850	80
133	35N 55E 14 BBC	06	17	76	Creek	88	45.4	116	10.3	43	.05		365		6.5	301
135	35N 54E 16 CDA	06	17	76	Creek	40.9	27.7	155	8.1	1.5	11		447		6.7	168
138	35N 54E 29 BCA	06	17	76	Creek	41.7	37.9	72	9.4	14	.30		267		3.5	188
141	35N 52E 09 BAD	06	17	76	Creek	59	48.2	443	15.3	1.3	08		521		12.1	843
145	34N 52E 03 DD	08	03	75	Well			820					1100		35	1900
147	35N 55E 21 CDD	06	16	76	Creek	90	48.2	34	8.9	.23	.07		387		5.7	172
148	35N 55E 27 DDD	06	18	76	Creek	117	72	80	13.8	.32	.20		516		22.9	310
149	34N 56E 10 DDD	06	16	76	Creek	60	3.5	8.6	9.4	.84	.14		170		2.5	52
150	33N 56E 05 AB	08	30	57	Well	1400	320	62000*					356		96000	3400
151	33N 56E 03 CC	09	14	64	Well	750	140	110000	3500				232		180000	840
155	32N 55E 27 BAA	06	16	76	Creek	47.1	34	91	10.5	2.6	.14		264		6	231
160	32N 59E 29 A	10	26	60	Well	12000	1600	110000	4200				110		200000	290
161	32N 59E 32 CD	03	20	68	Well	170	36	5700	100				2560		7800	68
165	32N 57E 30	04	09	76	Lake	34.8	23.8	110					322		6.2	162
166	32N 57E 31 A	05	06	76	Lake	34.1	39.3	150					345		9.1	264
167	32N 55E 36	04	09	76	Lake	40.8	19.5	96					281		4.4	162

Note All chemical date are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet (Cont.)

of Selected Waters (Cont.)

Map ref no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
67			7.1			60970	2400	360	196	Unknown		331KBBY	no	67M0003
68			6.6				4440	390		Unknown		331HETH	no	56M0012
71							45	804		Unknown		211JDRV	no	42M0002
77	< 10		8.02	17	21000	22310	3980	766	42.2	WQB			no	75W1762
83	02		8.35	15	2287	1626	360	426	9.7	WQB			yes	76W1718
84			6.3				28000	30		Unknown		331CRLS	no	65M0047
88	07	78	9.1	23	5017	4277	997	415	14.2	WQB			yes	76W1071
91	.05	.08	8.0	21	3749	2998	1040	297	7.6	WQB			yes	76W1072
100			5.5				16100	142		Unknown		331MOSN	no	66M0030
108			6.9		8040			120		WQB			no	75W1437
109			7.48		12000			159		WQB			no	75W1438
113			7.65		2420			241		WQB			no	75W1434
114			7.97		2613			843		WQB			no	75W1430
115			8.08		2560			797		WQB			no	75W1431
116			9.44		26000			2970		WQB			no	75W1429
117			6.6		50000			1060		WQB			no	75W1428
119			7.48		35600			125		WQB			no	75W1436
122			9.31		1384			268		WQB			no	75W1441
123			8.35		4310			274		WQB			no	75W1433
124			7.37		2044			613		WQB			no	75W1426
125			7.65		2822			752		WQB			no	75W1427
126			8.1		17300			267		WQB			no	75W1432
177			7.97		19400			96		WQB			no	75W1425
128			7.67		14000			98		WQB			no	75W1424
133	.04	12	8.0		1088	725	256	299	2.7	WQB			yes	76W1087
135	04	22	8.2		1704	676	216	367	4.6	WQB			yes	76W1088
138	11	12	7.85		1704	484	260	219	1.9	WQB			yes	76W1089
141	.04	.12	8.0		2315	1677	345	427	10.4	WQB			yes	76W1090
145			7.8	16	4600			903		WQB			no	75W1439
147	03	.11	7.9		956	550	424	317	.7	WQB			yes	76W1086
148	07	12	8.0		1350	870	590	423	1.4	WQB			yes	76W1085
149	.04	.08	7.4		452	220	165	139	.3	WQB			yes	76W1084
150			6.3				4810	292		Unknown		337MSNC	no	57M0011
151			7.3			291800	2450	190	967	Unknown		331MDSN	no	64M0024
155	.09	.11	7.8		846	549	258	216	2.5	WQB			yes	76W1082
160			6.8			323900	36600	90	250	Unknown		337MSNC	no	80M0011
161			7.8			15140	573	2100	104	Unknown		717MOOY	no	68M0004
165					748		185		3.5	MF&G			no	02W0010
166			7.72		1012	842	247	283	4.2	MF&G			no	75W0638
167			7.53		690		182		3.1	MF&G			no	02W0009

WOLF POINT

Chemical Analyses

Map ref. no.	Location T R Sec Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
168	32N 56E 31 CCB	06	16	76	Lake	40.4	20	54					228		4.9	104
169	32N 56E 31 CCB	06	16	76	Lake	34.5	36.5	238	16.4	1.3	.06		424	24	16.1	351
170	32N 55E 30 DDD	06	16	76	Creek	81	55	130	12.8	.43	.07		327		6.7	393
173	31N 45E 23 AA	01	31	57	Well	1300	240	23000*					551		35000	4200
174	31N 45E 23 AA	01	01	57	Well	480	190	9200*					259	64	14000	2300
175	30N 45E 24 AD	03	02	56	Well	760	150	13000*					346		18000	4300
176	30N 45E 24 AD	03	16	56	Well	10000	2000	110000*					162		190000	510
177	36N 58E 27	07	30	75	Seep			5800					382		12100	103
178	35N 58E 17 ADD	03	07	77	Well	164	88	177	6.8	.07	.55	22.8	732		6.5	527
179	27N 50E 35	07	27	76	River	55	62	405	8.4	<.05			478	16	13	803
181	26N 48E 15 CB	03	16	76	Creek	33.2	18.7	45	9.7				125		5.1	145
183	26N 44E 01 CCB	09	06	63	Canal	56	20	50	4.1	.08			189		8.4	162
184	26N 44E 10 BCC	09	05	63	Well	76	2.8	145	3.9	3.5	2.1	14	377		13	296
185	26N 45E 03 AAA	09	06	63	Well	179	59	422	7.4	7.0	2.8	19	482		33	1160
186	26N 45E 07 ADA	09	09	63	Well			56		3.1			256			140
187	26N 46E 02 DBB	11	06	63	Well	132	46	360	7.0	9.5	1.2	20	685		13	665
188	26N 46E 02 DCD	10	22	63	Well			402		1.6			627			522
189	26N 52E 06 CD	07	28	64	Well	1100	130	15000	260				537		24000	2800
190	26N 58E 01 BAD	04	15	64	Well	256	102	544	16	.97		20	1060		24	1400
191	27N 45E 33 CDD	10	09	47	Well	14	45	589	18	2.1		12	524		26	1010
192	27N 46E 26 ABA	11	17	63	Well	22	6.1	115	2.7			17	322		4	61
193	27N 46E 26 DDC	10	08	63	Well	108	45	354	5.2	4.4	1.5	17	718		14	572
194	27N 48E 35 DCD	10	22	63	Well	103	34	342	5.4	3.5	.53	18	720		16	487
195	27N 47E 14 CC	10	18	63	Well	85	32	402	5.4	5.1	.53	20	659		12	635
196	27N 47E 15 AC	10	10	47	Well	106	36	220	8.0	2.8		16	412		11	529
197	27N 47E 15 CB	10	15	47	Well	74	33	359	2.4	1.5		25	532		18	572
198	77N 47E 15 DCC	10	16	64	Well	56	26	310	5.8	5.1		18	684		30	314
199	27N 47E 21 AAD	10	16	64	Well	60	30	288	5.3	5.8		17	623		8.6	360
200	77N 47E 22 BBD	10	16	64	Well	49	24	310	5.1	3.1		18	576		10	390
201	27N 47E 24 CCC	07	23	64	Well	100	55	162	7.1	8.8		19	486		9.3	402
202	27N 47E 25 DD	09	05	63	Well	124	63	200	36	.04	1.2	12	442		48	473
203	27N 47E 25 DD	10	10	47	Well	174	56	240	3.2	.10		16	688		29	503
204	27N 48E 02 DCA	10	15	64	Well	113	62	726	7.6	3.5		18	546		30	1560
205	27N 48E 07 BDB	09	07	63	Well			750		3.3			746			1560
206	27N 48E 07 DCD	09	07	63	Well	95	51	447	5.7	2.8	1.4	18	722		14	815
207	27N 48E 11 ACB	09	07	64	Well	156	71	603	7.2	7.0		17	716		30	1320
208	27N 48E 10 CB	10	10	47	Well	100	40	197	11	2.3		14	662		6	288
209	27N 48E 20 DBA	09	06	63	Well	75	27	115	3.5	3.5	.11	18	436		7.1	178
210	27N 48E 28 D	09	06	63	Canal			53		.14			190			168
211	27N 48E 30 ABA	07	23	64	Well	211	118	376	7.8	15		18	555		26	1270

Note All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet (Cont.)

of Selected Waters (Cont.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (μmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
168			7.47		587	336	183	187		MF&G			no	7SW0639
169	.20	.19	8.7		1403	923	236	388	6.7	WQB			yes	76W1081
170	.05	.09	8.1		1296	820	380	268	2.9	WQB			yes	76W1083
173			6.7				4230	452		Unknown		337MSNC	no	57M0010
174			8.0				1200	319	2.4	Unknown		337MSNC	no	57M0009
175			6.6				2520	284		Unknown		224PIPR	no	56M0005
176			8.0				33200	133		Unknown		331CRLS	no	56M0015
177			7.45		30200			313		WQB			no	76W1436
178	1.446	.1	7.35		1903	1355	772	600	2.8	Private	70	125TGRV	no	76M1648
179	.02		8.4	20	2212	1842	393	419	8.9	EPA			yes	76W1712
181	.47		7.25		524	382	160	103	1.5	WQB			no	76W0489
183	.226	.8	7.7	17.2	648	403	221	156	1.5	USGS			no	63M0025
184	.023	.5	7.9		1150	742	304	309	3.6	USGS	18	110ALVM	no	63M0056
185	.158	.4	8.0	16.1	2800	2127	689	395	7.0	USGS	48	110ALVM	no	63M0057
186			7.6	13.3	686		244	210	1.6	USGS	63	110ALVM	no	63M0058
187	1.627	.7	7.0		2190	1594	519	562	6.7	USGS	106	110ALVM	no	63M0053
188			7.8	10.6	1960		173	514	13.0	USGS	105	110ALVM	no	63M0026
189			7.0			43350	3280	440	114	Unknown		331MDSN	no	64M0021
190	2.711	.7	7.8	8.9	3610	2888	1060	869	7.3	USGS	90	110ALVM	no	64M0054
191	.497	.8	7.3	7.8	2670	1974	220	430	17.0	USGS	21	110ALVM	no	47M0057
192	.068	1.4	8.0	8.3	614	388	80	264	5.8	USGS	42	110ALVM	no	63M0060
193	858	.5	7.8		2090	1476	455	589	7.2	USGS	80	110ALVM	no	63M0051
194	.294	.7	7.9	9.5	1950	1365	396	591	7.5	USGS	73	110ALVM	no	63M0062
195	.294	.8	7.7		2150	1523	344	540	9.4	USGS	106	110ALVM	no	63M0052
196	.565	.2	7.9	8.9	1740	1132	412	338	4.7	USGS	93	110ALVM	no	47M0054
197	.904	.8	8.3	10.6	1890	1349	320	436	8.7	USGS	100	110ALVM	no	47M0055
198	.090	1.1	7.9	7.8	1630	1103	248	561	8.6	USGS	110	110ALVM	no	64M0045
199	.158	.9	8.0	7.8	1590	1083	272	511	7.6	USGS	100	110ALVM	no	64M0046
200	.226	1.0	8.0	8.3	1590	1094	223	472	9.1	USGS	94	110ALVM	no	64M0047
201	.520	.7	7.8	9.5	1430	1004	477	399	3.2	USGS	54	110ALVM	no	64M0039
202	33.661	3	7.5	16.1	1900	1209	568	363	3.6	USGS	20	110ALVM	no	64M0043
203	22.591	.3	7.7	8.3	1820	1383	664	564	4.0	USGS	20	110ALVM	no	47M0058
204	.565	.9	8.1	7.2	3700	2790	536	448	14.0	USGS	51	110ALVM	no	64M0053
205			7.6	7.8	3880		540	612	14.0	USGS	48	110ALVM	no	63M0044
206	1.265	.7	7.9	7 2	2540	1808	447	592	9.2	USGS	58	110ALVM	no	63M0055
207	.610	.8	7.9	7 2	3340	2565	679	587	10.0	USGS	52	110ALVM	no	64M0052
208	.904	.8	7.6	7.8	1500	986	414	543	4.2	USGS	36	110ALVM	no	47M0052
209	.045	6	7.9		982	643	300	358	2.9	USGS	85	110ALVM	no	63M0054
210			7.6	20.6	655		221	156	1 6	USGS			no	63M0036
211	.949	6	7.9	8.9	2920	2317	1010	455	5.1	USGS	60	110ALVM	no	64M0050

WOLF POINT

Chemical Analyses

Map ref. no	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
212	27N	48E	30	BBA	10	14	64	Well	362	152	436	15	25		17	630		48	1750
213	27N	48E	30	CAD	08	29	64	Well	80	56	358	5.0	4.3		20	704		8.5	582
214	27N	49E	01	ADA	10	10	63	Well			148					311			261
215	27N	49E	01	ADA	10	10	63	Well			95		.68			349			237
216	27N	49E	01	DAD	10	28	63	Well	49	17	193	3.5			18	377		8.4	292
217	27N	49E	03	AAB	09	02	64	Well	70	35	224	4.2	.06		13	430		13	424
218	27N	49E	03	CA	10	14	47	Well	58	25	255	10	.34		11	534		12	345
219	27N	49E	09	DBC	09	07	63	Well			342		2.6			782			360
220	27N	49E	12	ADD	10	31	63	Well	85	42	82	2.4			16	380		12	226
221	27N	49E	13	AAC	11	05	63	Well	89	31	107	4.8	7.4	.88	22	453		8.8	187
222	27N	50E	01	D	09	07	63	Stream			258					550			177
223	27N	50E	12	AB	10	15	64	Well	28	15	234	4.6	.02		18	559		9.7	177
224	27N	50E	12	ADD	10	15	64	Well	39	21	267	7.0	.05		18	575		16	271
225	27N	50E	13	BDD	09	07	63	Well	54	31	214	4.7	.67	.39	9.9	541		9.2	281
226	27N	51E	18	BC	10	07	64	Well	183	59	279	7.0	.07		19	803		21	568
227	27N	51E	14	BDC	10	07	64	Well	146	61	125	6.3	.02		17	804		9.6	208
228	27N	51E	21	BBA	10	07	64	Well	115	56	93	6.8	.01		16	688		9.0	134
229	27N	51E	29	ABB	09	07	63	Well	7.1	23	617	9.2	.26	.03	2.9	588	20	16	900
230	27N	52E	17	BB	09	09	63	Well			150		2.2			463			227
231	27N	53E	06	BCD	10	08	64	Well	222	88	540	9.4	.08		19	864		44	1260
232	27N	55E	01	AA	05	12	64	Stream	59	19	65	4.2	.07		8.9	189		9.1	189
233	27N	55E	01	AAD	04	30	64	Well			663*					976			912
234	27N	55E	01	AAD	04	30	64	Well	90	23	652	4.4	.30		17	976		6.2	870
235	27N	55E	01	AAD	05	14	64	Well	75	33	664	4.4	3.2		25	984		6.8	900
236	27N	56E	03	CAB	05	05	64	Well	204	95	448	8.2	.32		18	948		16	1060
237	27N	56E	05	CDA	11	14	63	Well	120	44	495	7.2	7.6	.12	22	758		6.2	890
238	27N	56E	06	BBB	10	03	62	Well	71	19	495		4.0			735		14	680
239	27N	58E	35	AAB	09	20	63	Well	69	24	128	3.0	.02		18	391		8.2	210
240	27N	58E	36	BCD	09	23	63	Well	84	33	156	4.8			18	574		7.6	203
241	27N	58E	36	CDB	09	09	63	Well	160	70	384	8.6			24	738		15	875
242	28N	49E	36	CAA	11	06	63	Well			402		2.9			490			875
243	28N	49E	36	CBA	04	30	64	Well			408*					512			968
244	28N	51E	19	ABB	09	07	63	Well	164	88	244	15	.22	.03	19	758		137	320
245	28N	53E	25	DB	10	14	47	Well	105	111	697	22	3.4		14	1130		8.0	1270
246	28N	53E	29	DAC	10	05	63	Well	4.6	1.1	518	1.5	.09	.02	11	1050	32	112	27
247	28N	53E	30	DA	10	08	64	Well	30	16	260	1.5	.02		12	620		8.5	180
248	28N	53E	32	ADB	10	24	63	Well			550		.30			1050	33		8
249	28N	53E	32	DCD	10	07	63	Well			436					928	12		71
250	28N	54E	35	CAA	09	09	63	Well	185	67	193	6.4	1.6	.94	21	576		20	650
251	28N	54E	35	CAA	09	09	63	Well	96	42	118	6.8	2.9	.11	7.6	408		24	323

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated.
* Values reported as sodium plus potassium

1° x 2° Sheet (Cont.)

of Selected Waters (Cont.)

Map ref. no.	Nitrate (N)	Fluoride (F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
212	1.649	.7	7.7		3710	3118	1530	517	4.9	USGS	83	110ALVM	no	64M0049
213	.407	7	8.0	8.3	2090	1462	428	577	7.5	USGS	64	110ALVM	no	64M0048
214			7.7	8.9	1010		198	255	4.6	USGS	97	110ALVM	no	63M0045
215			7.7	8.3	982		332	288	2.3	USGS	97	110ALVM	no	63M0046
216	.023	.6	7.9	8.3	1170	765	194	309	6.0	USGS	85	110ALVM	no	63M0047
217	.023	.6	8.1	7.8	1480	996	318	353	5.5	USGS	105	110ALVM	no	64M0031
218	.407		7.8	8.3	1470	980	248	438	7.1	USGS	80	110ALVM	no	47M0053
219			8.0		1740		280	641	8.9	USGS	90	110ALVM	no	63M0048
220	.023	.4	7.8	8.3	988	653	383	312	1.8	USGS	98	110ALVM	no	63M0049
221	.045	.6	7.3	8.9	1030	682	350	372	2.5	USGS	86	110ALVM	no	63M0050
222			8.0	22.8	1310		140	451	9.5	USGS			no	63M0037
223	.294	1.0	7.9		1170	763	131	458	8.9	USGS	99	110ALVM	no	64M0042
224	.384	.8	8.0	10.6	1400	924	184	472	8.5	USGS	96	110ALVM	no	64M0041
225	.023	.5	7.8	13.9	1350	872	262	444	5.8	USGS	65	110ALVM	no	63M0051
226	1.333	.8	8.0	8.9	2130	1534	700	659	4.6	USGS	73	110ALVM	no	64M0044
227	1.175	.7	7.8	8.9	1470	971	616	659	2.2	USGS	30	110ALVM	no	64M0043
228	.158	.6	7.9	12.2	1210	770	516	564	1.8	USGS	20	110ALVM	no	64M0040
229	2.937	.6	8.4	13.9	2930	1889	111	516	25.0	USGS	77	110ALVM	no	63M0038
230			8.1	11.7	1120		289	380	3.8	USGS	75	110ALVM	no	63M0041
231	.090	.7	8.0	8.9	3360	2609	915	2610	7.8	USGS		110ALVM	no	64M0035
232	.045	.8	7.5		706	448	224	155	1.9	USGS			no	64M0033
233			8.0	8.9	3070		308	800	16.0	USGS	109	110ALVM	no	64M0036
234	.090	1.5	7.8	9.5	3000	2145	319	800	16.0	USGS	36	110ALVM	no	64M0037
235	.045	1 6	7.8	9.5	3030	2198	323	807	16.0	USGS	126	110ALVM	no	64M0028
236	.023	.8	7.5	8.3	3050	2317	900	778	3.2	USGS	90	110ALVM	no	64M0038
237	1.694	.9	7.4	8.3	2690	1968	479	622	9.8	USGS	157	110ALVM	no	83M0042
238	.113	.8				1646	256	603	13.0	USGS	115	110ALVM	no	62M0017
239	.090	.7	7.8		985	652	271	321	3.3	USGS	58	110ALVM	no	63M0040
240	.045	.7	7.9		1210	790	344	471	3.7	USGS	80	110ALVM	no	63M0027
741	.023	.5	7.7	9.5	2550	1901	688	605	6.4	USGS	118	110ALVM	no	63M0028
247			7.4	8.9	2360		416	402	8.6	USGS	68	110ALVM	no	63M0024
243			7.8	7.8	2520		540	420	7.6	USGS	55	110ALVM	no	64M0027
244	46.989	.5	8.0	8.3	2330	1409	769	622	3.8	USGS	18	110ALVM	no	63M0020
245	.113	.6	7.8	8.3	3750	2788	718	927	11.0	USGS	90	110CLVM	no	47M0048
746	.452	5.4	8.5	11.1	1990	1230	16	915	56.0	USGS	82	110ALVM	no	63M0029
247	.587	1.0	8.1		1280	815	142	509	9.5	USGS	106	112DRFT	no	64M0032
248			8.4	9.5	2220		31	916	43.0	USGS	88	110ALVM	no	83M0031
249			8.3	10.6	1750		12	781	55.0	USGS	100	110ALVM	no	63M0030
250	.226	.6	7.5		1990	1430	739	472	3.1	USGS	30	110ALVM	no	63M0032
751		.5	7.4	11.7	1280	822	434	335	2.5	USGS	78	110ALVM	no	63M0033

WOLF POINT

Chemical Analyses

Map ref no	Location T	R	Sec	Tract	Collection date Mo	Day	Yr	Source	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Iron (Fe)	Manganese (Mn)	Silica (SiO_2)	Bicarbonate (HCO_3)	Carbonate (CO_3)	Chloride (Cl)	Sulfate (SO_4)
252	28N	55E	21	ACC	09	10	63	Stream			341					628			474
253	28N	55E	32	AC	09	09	63	Well			469					997			1380
254	28N	55E	33	DAD	10	13	47	Well	229	103	467	14	3.6		12	1190		26	971
255	28N	56E	27	BD	09	10	63	Well	58	24	81	3.1	.05	.17	19	385		2.0	60
256	28N	56E	29	CD	10	12	64	Well	153	71	519	7.6	.02		22	770		8.7	1110
257	28N	57E	25	ACA	10	12	64	Well	75	24	438	10	16		23	784		5.7	548
258	28N	57E	32	DD	10	13	47	Well	158	59	13	10	10		21	351		57	293
259	33N	49E	34	CB	05	16	56	Well	1600	280	29000*					259		45000	3400

Note: All chemical data are given in milligrams per liter (mg/l) unless otherwise stated

* Values reported as sodium plus potassium

1° x 2° Sheet (Cont.)

of Selected Waters (Cont.)

Map ref. no.	Nitrete (N)	Fluoride F)	Lab pH	Field Temp. C°	Lab specific conductance (µmho/cm)	Dissolved solids (calc.)	Total hardness as $CaCO_3$	Total alkalinity as $CaCO_3$	Sodium adsorption ratio	Collecting agency	Well depth (ft.)	Aquifer code	Trace elements analyzed	Lab number
252			7.7	25.0	1820		241	515	9.8	USGS			no	83M0039
253			7.4		3490		1200	816	5.9	USGS	100	110ALVM	no	63M0034
254	1.401		7.1	7.2	3230	2413	995	976	6.4	USGS	15	110ALVM	no	47M0049
255	.520	.3	7.4	9.5	689	418	244	316	1.7	USGS	16	110ALVM	no	63M0035
256	4.066	1.0	8.0	7.8	3000	2278	672	632	8.7	USGS	80	110ALVM	no	64M0030
257	.249	1.0	8.0	8.3	2160	1511	285	643	11.0	USGS	147	112ORFT	no	64M0029
258	1.355	.1	8.1	7.8	1240	788	637	288	.2	USGS	19	110ALVM	no	47M0050
259			6.2				5150	212		Unknown		337MSNC	no	56M0017

WOLF POINT 1° x 2° Sheet

Trace Elements Analyses Sheet

Map ref. no.	Location T R Sec Tract	Alu-minum (mg/l)	Anti-mony (mg/l)	Ar-senic (µg/l)	Beryl-lium (µg/l)	Boron (mg/l)	Cad-mium (mg/l)	Chro-mium (mg/l)	Copper (mg/l)	Lead (mg/l)	Lith-ium (mg/l)	Mer-cury (µg/l)	Nickel (mg/l)	Phosphate (Total dissolved)	Selenium (µg/l)	Silver (mg/l)	Stron-tium (mg/l)	Tin (mg/l)	Zinc (mg/l)	Lab number
1	37N 49E 16 DD			2	<10	<.10	<.001	<.05	<.01	<.05	<.01	<.2	<.06		<1				.02	76W1092
3	37N 48E 05 AA	.15		5		9	<.001	<.06	<.01	<.05		2.6	<.05	.030					.10	76W0499
12	36N 50E 22 CCC			2	<10	.12	<.001	<.05	<.01	<.05	.01	<.2	<.05		<1				.01	76W1091
17	35N 47E 12 ADD			6	<10	.49	<.001	<.05	<.01	<.05	.04	<.2	<.05						.02	76W1095
21	35N 50E 27 CBB			2	<10		<.001	<.05	<.01	<.05	.02	<.2	<.05		<1				<.01	76W1093
25	33N 50E 03 CB			6	<10	<.10	<.001	<.06	<.01	<.05	.02	<.2	<.05		<1				<.01	76W1094
34	31N 50E 27 CD	.15		2		<.10	<.001	<.05	.01	<.05		<.2	<.05						<.01	76W0497
38	30N 56E 07 BBB			4	<10	<.10		<.05	<.01	.05	<.01	1.3	<.05		1				<.01	76W1080
39	30N 57E 14 DD			3		<.10	<.001	<.05	<.01	<.05	<.10	.8	<.05		1				.03	76W1078
40	30N 58E 14 DCC			4	<10	13	.001	<.05	<.01	<.05	.06	2.2	<.05		1				<.01	76W1077
44	30N 56E 30 BBB			1	<10	.12	.001	<.05	<.01	<.05	.042	1.5	.03		1				<.01	76W1079
58	28N 59E 28 DCC			3	<10	235	.001	<.05	<.01	.05	.05	<2	<.05		1				<.01	76W1075
57	28N 59E 32 AAC			3	<10	.268	.003	<.05	<.01	<.05	.06	<.2	.06		<1				<.01	76W1076
60	28N 58E 20 DDD			8	<10	.27	.003	<.05	<.01	<.05	.06	<.2	<.05		1				<.01	76W1074
61	28N 56E 27 ADD			3	<10	.255	001	<.05	<.01	<.05	.02	<.2	<.05		2				.05	76W1073
83	27N 50E 35					.30									1				<.01	76W1718
88	26N 54E 15 BBB			9	<10	.23	.015	<.05	.01	.05	.07	<2	.08		1				<.01	76W1071
91	26N 55E 01 DBB			2	<10	.245	.01	<.05	.01	<.05	.07	<2	.08		1				<.01	76W1072
133	35N 55E 14 BBC			2	<10	.29		<.05	<.01	<.05	.05	<2	<.05		<1				<.01	76W1087
135	35N 54E 16 CDA			3	<10	.34	.003	<.05	<.01	<.05	.04	<2	<.05		1				<.01	76W1088
138	35N 54E 29 BCA			4	<10	.27	<.001	<.05	.01	<.05	.02	<2	<.05		2				.05	76W1089
141	35N 52E 09 BAD			4	<10	.54	.003	<.06	<.01	<.05	.04	<.2	<.05		<1				<.01	76W1090
147	35N 55E 21 CDD			3	<10	14	.003	<.05	.01	<.05	.05	<.2	<.06		<1				04	76W1086
148	35N 55E 27 DDD			6	<10	.20	.001	<.05	<.01	<.05	.06	<.2	<.06		<1				<.01	76W1085
149	34N 56E 10 DDD			3	<10	<.10	<.001	<.06	<.01	<.05	<.01	<.2	<.05		<1				.05	76W1084
166	32N 55E 27 BAA			3	<10	.26	.001	<.06	.01	.06	.03	1.4	<.05		<1				.06	76W1082
169	32N 56E 31 CCB			7	<10	.35		<.06	.01	.05	.05	1.8	<.05		<1				.01	76W1081
170	32N 55E 30 DDD			6	<10	.36	.001	<.05	<.01	.06	.05	.4	<.06		<1				.07	76W1083
179	27N 50E 35					.30									<1				<.01	76W1712

AN ALGAL SURVEY OF SURFACE WATERS IN EASTERN MONTANA SUSPECTED TO BE INFLUENCED BY SALINE SEEP, WITH SPECIAL EMPHASIS ON SALINITY INDICATORS AND POTENTIALLY TOXIC SPECIES

By

Loren L. Bahls and Peggy A. Bahls

CONTENTS

ABSTRACT

One hundred samples of benthic algae were collected from surface waters in eastern Montana suspected of being influenced by dryland salinity. The class Bacillariophyceae (diatoms) was the most abundant and diverse group, dominating 62 percent of the samples and represented by 291 distinct taxa in 38 genera. Diatom species diversity was inversely correlated with specific conductance and the relationship was significant to the 1 percent level of probability. Several taxa with documented brackish water affinities were among the more common diatoms encountered. The spectrum of salinity values for the waters surveyed (332-42519 mg/l TDS) eclipsed the maximum and minimum tolerances for many of the diatom taxa described. Although blue-green algae comprised a relatively minor portion of the total flora, potentially toxic taxa were present in 25 of the 100 collections. A determination of the immediate threat to livestock from consumption of waters containing these algae and documentation of possible toxic algae blooms in stockponds across eastern Montana could not be accomplished given the methods employed in this survey. Proposals are made for educating ranchers on the potential toxic algae problem and for establishing a biological salinity impact monitoring network.

INTRODUCTION

This report describes the attached or benthic algae (phycoperiphyton) found at 100 different sites on a variety of surface waters in eastern Montana suspected of being influenced by dryland salinity. Most of the waters sampled were small first and second-order streams, however they ranged in size from tiny spring seeps to the Missouri River at the Fred Robinson Bridge. An assessment is made of the susceptibility of livestock and wildlife to potentially toxic blue-green algae encountered in these waters. Diatom taxa useful as salinity indicators are identified and their respective salinity tolerances are described.

Salinity in surface and ground waters is a well-known and long-standing problem in eastern Montana. In recent years salinity levels in certain waters have been increasing (5, 15). It is believed that a major contributor to this growing problem is the process called saline seep (4, 9, 20).

Salinization of surface waters used by livestock has been implicated in recent reports of cattle deaths near stock ponds in saline seep areas (29). These waters, in addition to the high concentrations and array of dissolved minerals and nutrients they are known to contain, may harbor strains of blue-green algae that are lethal to livestock and wildlife following water blooms (7, 19, 22, 31). Species containing suspected toxic strains are known to occur in a broad band across the northern United States and southern Canada, and may be found in waters having a total dissolved solids content of up to 20,000 mg/l (25, 26).

The primary objective of this survey was originally to determine whether potentially toxic blue-green algae regularly form water blooms in reservoirs frequented by livestock and, if they do, what factors contribute to such blooms. Their occurrence in waters affected by irrigation or dryland salinity may present an additional and unsuspected operating hazard to eastern Montana livestock producers. Small streams in eastern Montana are often intermittent and cannot be relied on as a source of stock water the year round. Impounded in reservoirs, water is available for all of the ice-free season. Most potentially toxic species of blue-green algae are planktonic and realize their full lethality only following a bloom in the open, standing water of lakes and reservoirs (7). It was therefore proposed initially that at least 50 of the 100 algae samples be taken from the plankton of stock-watering reservoirs (3). Unfortunately, due to time and access limitations, only a handful of samples (eight) were collected from such waters; all were taken from the periphyton and none were taken from the plankton. Consequently, the results from this phase of the survey are inconclusive.

However, another useful purpose has been served by completion of this survey. Algae, particularly diatoms, are useful as monitors of water quality. Because they directly utilize dissolved minerals and nutrients in their metabolic processes, they are orders of magnitude more sensitive to changes in the ambient concentrations of these elements than either invertebrates or fish. They reproduce much faster than invertebrates or fish, hence their

response is more immediate. They are also less mobile and less able to evade the consequences of pollution. As biological organisms they integrate the effects of all the various physical and chemical factors to which they are exposed. The environmental requirements and pollution tolerance of many freshwater diatoms have been documented (17). The absence, or when present the relative abundance, of certain species and varieties may indicate specific water quality conditions.

The waters sampled in this survey vary in salinity[1] from levels typical of freshwater to and exceeding those of sea water. Given such a broad range in total ionic load, the correlation of dissolved solids and electrical conductivities of these waters with the relative abundances of their more common diatom taxa will make it possible to identify certain species and varieties that may serve as salinity indicators. Such taxa may be used in lieu of or in concert with physicochemical analyses as markers of salinization in surface waters of eastern Montana.

One incidental benefit will accrue from completion of this survey. It will enhance our knowledge of the distribution of diatoms in Montana and will represent a significant contribution to a statewide diatom flora now in initial stages of preparation.

METHODS

One hundred samples of benthic (attached) algae were collected from 100 different sites in eastern Montana by personnel of the Water Quality Bureau (Montana Department of Health and Environmental Sciences), the Montana Bureau of Mines and Geology, and by this writer. Dates and locations of algae samples are listed in Appendix A. Collectors were instructed to sample macroscopic algae in proportion to their abundance at a given site and to scrape microscopic algae from natural substrates roughly in proportion to the importance of each substrate (rocks, mud, etc.) at each site, thus giving a representative composite sample (2). Substrates were scraped with a carefully cleaned scalpel or pocket knife. Samples were labelled, preserved with Lugol's (IKI) solution and shipped to Helena for microscopic analysis. In most cases a water sample was collected on the same date as the algae sample. Water samples were analyzed for dissolved solids and electrical conductivity at the Department of Health laboratory in Helena. In some cases, field conductivity measurements accompanied the algae sample.

Algae samples were analyzed microscopically as follows. Macroscopic filamentous algae were placed on a glass slide roughly in proportion to their abundance in the sample. The sample was then agitated and an aliquot of suspended microscopic algae was pipetted onto the same slide. A coverslip was added and this "wet mount" was scanned under low magnification (100X) to estimate the relative importance of algal taxa in the sample. (A magnification of 400X was used for critical identification of taxa.) Whenever possible the more common taxa were assigned an order of rank. At this stage diatoms were

[1] The salinity of an inland water may be regarded as the concentration of all the ionic constituents present, according to Hutchinson (13).

considered as a group and all other algae were identified and ranked at the level of genus.

The remainder of the sample was then "cleaned" in a mixture of concentrated sulfuric acid and potassium dichromate. This process effectively oxidizes all the organic contents of the ornamented silica diatom frustules, which is necessary for accurate identification and enumeration. Following repeated decantation and dilution with distilled water, the cleaned sample was thoroughly mixed and a few drops pipetted onto a coverslip. When all moisture on the coverslip had evaporated, a permanent mount was prepared by inverting the coverslip on a heated glass slide containing two drops of a high refractive index mounting medium. The slide was labelled and then stored to await detailed diatom analysis.

The permanent diatom slide was scanned, first under low dry (100X) and then under oil immersion (1,000X), and a list was prepared of those taxa that could be found within a reasonable length of time, usually 30 minutes. Diatoms were identified to species, and to variety and form where appropriate and possible using available keys (10, 23, 24). Once a diatom flora was prepared for the site, the slide was examined under oil immersion beginning at one edge of the coverslip until at least 100 frustules were identified and enumerated. Work by McIntire and Overton (18) indicated that 100 is about the smallest sample size that one can use and still yield diversity and relative abundance values reasonably representative of the diatom association as a whole. Percent relative abundance values were calculated for each taxon and two diversity indexes were calculated for each sample:

Margalef's index (8)

$$D = \frac{S - 1}{\ln N}$$

and Simpson's index (28)

$$SD = 1 - \sum_{i=1}^{S} \left(\frac{n_i}{N} \right)^2$$

where S is the number of species, N is the total number of individuals in the sample, and n_i is the number of individuals in the i-th species. Percent relative abundance and frequency or occurrence were calculated for each taxon over all 100 samples. These two statistics were then multiplied giving an abundance-occurrence index, which is directly related to the chances of finding that particular taxon at any one of the 100 sites (1).

At those sites where water samples were taken, species relative abundance and diversity statistics were correlated with specific conductance (SC) values. Salinity optima and ranges of the more common taxa were expressed in terms of total dissolved solids (TDS). Only these two estimators of ionic load were selected for comparison because it is unlikely, over the wide range of salinity encountered, that any other water quality parameters would be as effective at determining species diversity or relative abundance. Temperature and nutrients, considered initially (3) because they are known to be significant

in promoting blooms of blue-green algae (14), were not used in this analysis because (i) the plankton community was not sampled, (ii) no known water blooms were sampled, (iii) blue-green algae were only a small fraction of the entire flora, and (iv) spot temperature measurements could not have been used with confidence because of temperature's tendency to undergo marked diurnal fluctuation.

RESULTS

Non-diatom Algae

Non-diatom algae in six major groups and 57 genera were encountered in the periphyton at the 100 localities sampled. A complete list of genera is in Appendix B. Because the plankton community was not sampled, the great majority of these genera are attached forms, however a few incidental plankters were encountered.

Table 1 gives the rank frequency of the most prominent non-diatom algal genera. As a group the green algae were the most important among the non-diatoms, and Cladophora was the most abundant non-diatom genus. Following the greens, the blue-greens, chrysophytes, euglenoids, red algae, and cryptomonads were the other non-diatom groups in descending order of abundance. Besides Cladophora, other significant non-diatom genera were Rhizoclonium and Spirogyra among the greens, and Oscillatoria and Phormidium among the blue-greens.

The freshwater blue-green algae suspected of producing strains toxic to wildlife or livestock are listed in Table 2. Six of the genera included on this list (Anabaena, Aphanizomenon, Gomphosphaeria, Lyngbya, Nodularia, and Nostoc) were encountered in 25 of the 100 samples (see Appendix A). Four of these genera--Anabaena, Aphanizomenon, Lyngbya, and Nostoc--were important enough to be ranked in Table 1. None was present in the massive concentrations typical of a bloom, however, verification of the presence or absence of a bloom cannot be accomplished without sampling the plankton community or without some record of the collector's visual observations. Nevertheless, potentially toxic blue greens apparently comprised a relatively minor portion of the overall algal flora in the waters sampled.

Only one suspected toxic blue-green alga--Aphanizomenon flos-aquae--was identified conclusively to species. A. flos-aquae was found in two of the eight standing waters sampled (Appendix A). It ranked second both times although the colonies were fragmented and appeared to be in a sensecent condition. Samples at these locations may have been taken shortly after the peak of a water bloom when many colonies of this ordinarily planktonic species had sunk to the bottom. Of the species thought to produce toxic strains, there is less evidence to implicate A. flos-aquae than any of the others; it is not known with certainty whether this taxon can be toxic (7).

The Diatom Flora

Diatoms representing 38 genera in 291 distinct taxa were identified in the 100 periphyton collections. Many additional taxa were recognized but could not be identified using available keys. About 60 percent of these taxa were the same as those reported by Hustedt from a number of saline lakes in

Europe (11, 12). As a group, diatoms ranked among the first three most important algae in 96 of the 100 samples; diatoms ranked first 62 times, second 22 times, and third 12 times. Overall, it was the most abundant and diverse group of algae in the waters that were sampled. (See Table 1 and Appendix B for abundance and diversity of other algae groups.)

Percent relative abundance, percent frequency of occurrence, and the abundance-occurrence index for each of the 291 diatom taxa are listed in Appendix C. Relative abundance values are based on a total count of 15,185 individual frustules (cells); frequency values are based on a total of 100 samples. *Achnanthes minutissima* had the highest relative abundance value, contributing slightly less than 10 percent (9.53 percent) of all the frustules counted. *Nitzschia palea* was the most frequently occurring diatom, found in 90 of the 100 samples. The maximum possible abundance-occurrence value would be 100 percent relative abundance times 100 percent frequency equals 10,000. *N. palea* ranked first in abundance-occurrence (607.60) and *A. minutissima* ranked second (409.79). In all, only 18 taxa had abundance-occurrence values greater than 50. These taxa are given in Table 3. They may be considered the most common taxa in waters subject to saline seep in eastern Montana. Except for those with a broad ecological amplitude, they are also the ones most amenable for comparison with water quality parameters and the ones most useful as indicators of surface water salinization.

Salinity and the Diatom Community

Specific conductance (SC) measurements, either field or laboratory, were available for 94 of the 100 waters sampled. Total dissolved solids (TDS) measurements were available for 57 of those same 94 waters. Because water-use criteria for livestock, irrigation, and human consumption are more commonly expressed in TDS rather than SC, it was desirable to convert SC to TDS in those instances where TDS values were not available and SC values were. Assuming a linear relationship exists between the two parameters a regression equation was calculated using the 57 pair of measurements:

$$\mathrm{TDS} = 0.85\ \mathrm{SC} + 19$$

The remaining SC values were then entered individually and the equation solved for TDS.

Margalef (D) and Simpson (SD) diversity indexes were calculated for the 97 diatom associations that were enumerable (diatoms in three collections were too sparse to count). Values for these indexes, along with measured SC values and measured and calculated TDS values, are listed in Appendix D.

Simple correlation coefficients (r) were then computed between SC and each of the two diversity indexes for the 91 sites having both diversity and salinity data. The following correlation coefficients were obtained:

$$r_{DSC} = -0.451$$

$$r_{SDSC} = -0.468$$

Both of these values are significant to the 1 percent level of probability, indicating there is a significant inverse relationship between salinity and diatom diversity in the waters sampled.

Simple correlation coefficients between species relative abundance and SC values were also calculated for the 18 most common diatom taxa listed in Table 3. None of the coefficients obtained (Table 4) proved to be significant, even to the 5 percent level of probability. Two factors might account for this: (i) the relationship may not be linear, and/or (ii) other parameters may be more important in determing relative abundance over the range of salinity values for a given species.

To test the former hypothesis, the percent relative abundance values of two species were plotted as a function of SC. Figure 1 shows that within the salinity ranges of these two species, the relationship is more bell-shaped than linear, with an optimum lying somewhere between the two extremes. Consequently, a significant linear relationship could be expected only on one or both sides of the optimum. Over the entire salinity range, any positive and negative coefficients on either side of the optimum could be expected to cancel one another, thus at least partly explaining the low r values in Table 4.

Maximum, minimum, and mean TDS values for 25 of the more frequently occurring taxa are also listed in Table 4. Extreme TDS values well beyond the normal range of a taxon and represented by only one cell were eliminated from consideration to discount any possible chance occurrence. The maximum and minimum values therefore delineate the normal salinity range for each taxon in the waters that were sampled. The mean TDS value is intended as an estimator of the optimum salinity level for each taxon.

DISCUSSION

Maximum allowable salinity levels in water depend on what the water is to be used for. For human consumption salinity should not exceed 500 mg/l TDS (6). For irrigation it should not exceed 5,000 mg/l TDS (6), although detrimental effects may begin at around 1,500 mg/l TDS (30). For stock water for beef cattle it should not exceed 10,000 mg/l TDS (6), although water in excess of 4,000 mg/l TDS may be unsatisfactory (21).

The value of a diatom as a water quality indicator is primarily a function of its ecological amplitude. A taxon found over a broad range of salinity values is not as useful for this purpose as one with a relatively narrow tolerance. To illustrate, the mean and extreme salinity levels of the taxa listed in Table 4 are superimposed over the maximum permissible levels for the water uses discussed above (Figure 2). In making this comparison, a number of points become evident. First, three species are relatively valueless as indicators because of their broad salinity range, which matches the range of TDS for all 91 samples. Second, none of the taxa can be used affirmatively as an indicator of water suitable for human consumption. The most salinity intolerant form--Nitzschia dissipata--indicates water that is suitable for livestock and most irrigation applications. At the other end of the scale,

Amphora coffeiformis is indicative of water that is unsuitable for drinking, most irrigation, and probably stock watering as well. In between these two taxa are 23 others with varying salinity ranges and means.

Kolbe (16) devised a halobion spectrum for circumscribing salinity preferences of diatom taxa. Although it was originally intended to apply only to chlorides, it is generally understood to reflect total salt concentration in its present usage. Kolbe's halobion spectrum is presented in Table 5.

Lowe (17), Patrick and Reimer (23, 24), and others have summarized the salinity preferences of a great many diatom taxa from a large number of published reports. Reported salinity preferences for the 25 taxa in Table 4 and Figure 2 are given in Table 6. These descriptions are generally in agreement with salinity ranges and means associated with these taxa in eastern Montana.

The wealth of published information on salt preferences for most common freshwater diatoms offers an excellent opportunity for devising a biological system for rating salinity effects in surface waters. To begin with, the spectral designations in Table 5 could be scaled as follows:

oligohalohous	1.0
beta-mesohalobous	2.0
alpha-mesohalobous	3.0
euhalobous	4.0
polyhalobous	5.0

Next, a diatom sample is collected from a water in question. The sample is counted and percent relative abundance values are determined for all taxa. Then each taxon is assigned to one of the above spectral designations and weighted according to its relative abundance, which is multiplied by the scaled value of that designation. These products are added and then divided by 100, which puts the final value within range of the scale described above. A rating of less than 2.0 would indicate fresh (oligohalobous) water with TDS less than 500 mg/l. A rating between 2 and 3 would indicate brackish (beta-mesohalobous) water with TDS between 500 and 10,000, and so on.

To further illustrate how this rating system might work, an example is taken from the present survey. Sample 0211A had six species distributed as follows:

Navicula pygmaea	43.9%	x	2.0	=	87.8
N. cincta var. rostrata	10.7	x	2.0	=	21.4
N. protracta	5.0	x	2.0	=	10.0
N. odiosa	0.8	x	2.0	=	1.6
Amphora coffeiformis	38.8	x	3.0	=	116.4
Navicula tenelloides	0.8	x	3.0	=	2.4
	100.0				239.6

The first four listed taxa are considered beta-mesohalobous and should be scaled with a value of 2.0 as indicated. The last two taxa may be considered alpha-mesohalobous and should be scaled with a value of 3.0. The sum of products divided by 100 gives a biological salinity rating of 2.4 or somewhere about midway between 500 and 10,000 mg/l TDS. The TDS value at this site, estimated from SC, was 6,394 mg/l.

The value of a system such as this, however, is not its ability to estimate TDS. Even assuming it is reasonably accurate at doing so, it would be much simpler to measure TDS directly. Its real value lies in its numerical representation of the collective response of a significant portion of the biological community to a given category of stress applied over a period of time. After refinement and testing, such a scaling system could be used for monitoring the biological response to surface water salinization in eastern Montana.

CONCLUSIONS AND RECOMMENDATIONS

This survey has established the potential of algal toxicity to livestock and wildlife in one quarter of the waters sampled. However, for a variety of reasons repeated below, no statement can be made regarding the immediate danger to such animals posed by possibly toxic algae consumed in waters subject to saline seep in eastern Montana:

1. Most of the samples were collected in the spring of the year, a time when blue-green algae do not reach their full growth potential.

2. Water blooms, responsible for most cases of algal toxicity, ordinarily develop only in the plankton of standing waters. Such waters (reservoirs) are also the most dependable water supplies for livestock and wildlife. Standing waters accounted for only 8 of the 100 collections and the plankton community was not sampled in any of these.

3. Taxonomic identification does not confirm the presence or absence of a toxic algae problem. Different strains of the same species, undistinguishable under the microscope, can form blooms that are deadly or merely obnoxious.

4. About 85 percent of the samples were collected by individuals unfamiliar with algal growth forms and sampling techniques. Although unlikely, these individuals may have overlooked concentrations or blooms or potentially toxic algae.

Nevertheless, the potential is significant enough to warrant an effort to educate livestock producers of the problem. Ranchers should be warned to refrain from watering their livestock with waters having a green "pea soup" appearance, which may develop from late summer into autumn. Ranchers, county extension agents, and other local agricultural people should be advised to send samples of such waters to the Water Quality Bureau for analysis. If the sample contains a potentially toxic species in concentrations typical of a bloom, the water should be tested in laboratory animals following standard clinical procedures. Ranchers should also be advised to submit for analysis

samples of any waters suspected of causing death or sickness in livestock regardless of the water's appearance. All samples should be submitted as soon as possible after toxic effects become apparent or a bloom appears. A pint or quart jar of water scooped from near shore would be a sufficient sample for diagnosis of a toxic algae problem.

A statistically significant relationship exists between high salinity levels and low biological diversity in the waters sampled. More subtle changes in species relative abundance and gradual replacement of less tolerant species also accompanied salinization. The diatom component of the periphyton community may prove to be a sensitive monitor of the biological effects of salinity increases in surface waters of eastern Montana. Most of the species encountered are widely distributed and their salinity preferences have been well documented. Enough information on the autecology of various species exists for constructing a salinity impact rating system based on salinity preferences and species relative abundance.

This consultant proposes establishing a biological salinity impact monitoring network composed of 10 to 20 stations on a few key waterways in eastern Montana. Existing water quality monitoring stations of the USGS or Water Quality Bureau could be adopted and new stations set up where there is significant evidence of increasing salinization. In addition to the standard physical and chemical water-quality parameters, the network would emphasize periodic measurements of diatom community response, including species diversity, species relative abundance, and periphyton biomass accrual on artificial substrates.

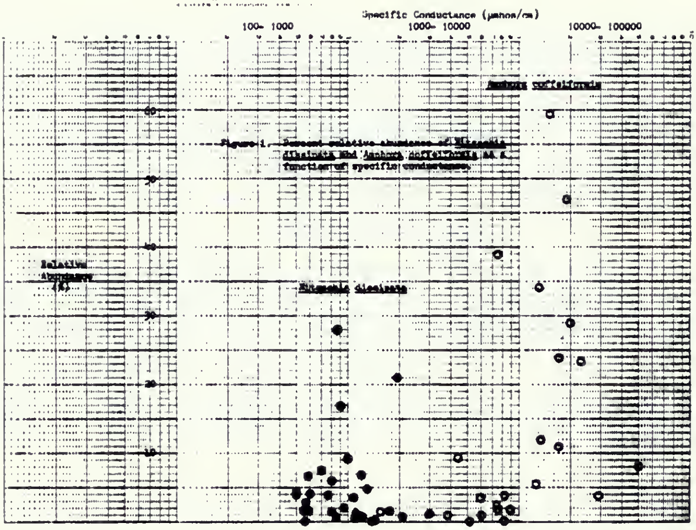

Figure 1.—Percent relative abundance of *Nitzschia dissipata* and *Amphora coffeiformis* as a function of specific conductance.

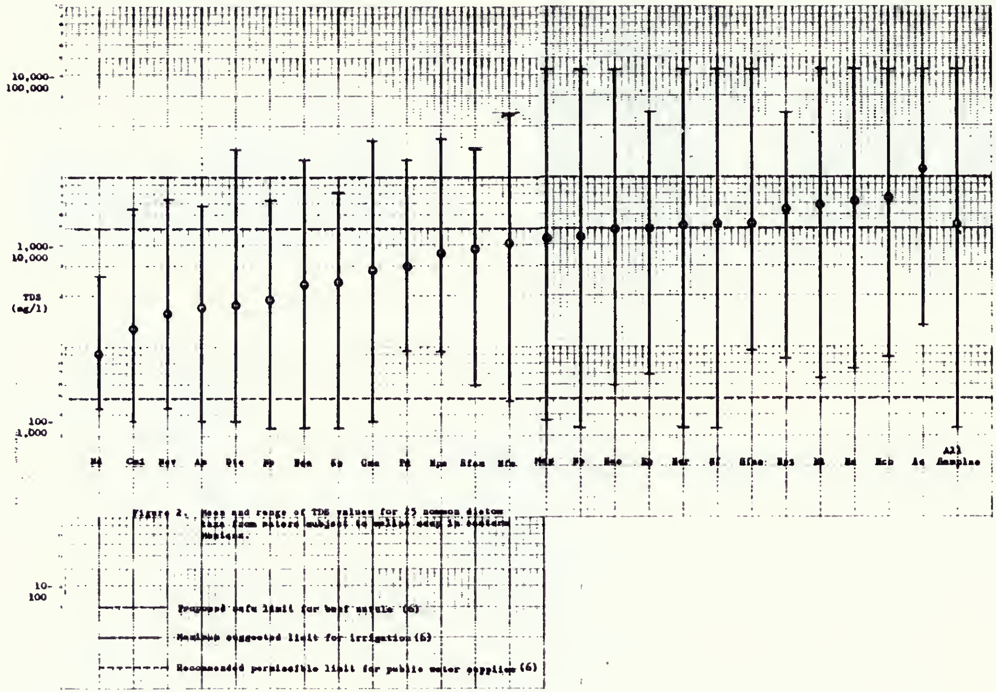

Figure 2. Mean and range of TDS values for 25 common diatom taxa from waters subject to saline seep in eastern Montana.

Table 1. Rank frequency of diatoms and prominent non-diatom genera in the periphyton of surface waters suspected to be influenced by saline seep in eastern Montana.

	Rank 1	2	3	4	5
Diatoms (Bacillariophyceae)	62	22	12		
Chlorophyta	24	15	7	5	2
Chara	1				
Chlorococcum				1	
Cladophora	10	1			
Closterium		1		1	
Enteromorpha	1			1	
Gloeocystis		1			
Hormidium		1			1
Mougeotia		1	2		
Oedogonium	1	1			
Platymonas	2		1		
Rhizoclonium	4	4	1	1	1
Sphaerocystis				1	
Spirogyra	4	1	2		
Stigeoclonium	1				
Ulothrix		3	1		
Zygnema		1			
Cyanophyta	7	17	10	3	
*Anabaena	1	1	1		
*Aphanizomenon		2			
*Lyngbya	1				
*Nostoc			1		
Oscillatoria	4	7	3		
Phormidium	1	4	2	1	
Rivularia		1		2	
Spirulina		1	3		
Tolypothrix		1			
Chrysophyta	6	1	1		
Chrysococcus	1				
Tribonema	2	1	1		
Vaucheria	3				
Euglenophyta	1	1	1		1
Euglena	1	1	1		1
Rhodophyta		1			
Audouinella		1			

*Genera containing species of blue-green algae suspected of producing strains that are toxic to livestock or wildlife.

Table 2. Freshwater blue-green algae suspected of producing strains that are toxic to wildlife or livestock.

Taxon	References
Anabaena	19, 22
A. circinalis	22
A. flos-aquae	7, 22, 31
A. lemmermannii	7, 22, 31
Anacystis (Microcystis)	19, 22
A. aeruginosa	7, 19, 31
A. cyanea	22
Aphanizomenon flos-aquae	7, 19, 22, 31
Coelosphaerium	19
C. kuetzingianum	7, 31
Gloeotrichia	19
G. echinulata	7, 22, 31
Gomphosphaeria	19
G. lacustris	22
Lyngbya	19
L. contorta	22
Nodularia	19
N. spumigena	7, 19, 22, 31
Nostoc rivulare	19

Table 3. Percent relative abundance, percent frequency (occurrence), and abundance-occurrence index for the 18 most common diatom taxa.

Rank	Taxon	Abundance (%)	Frequency (%)	Abundance-Occurrence (max.=10,000)
1	Nitzschia palea	6.75	90	607.50
2	Achnanthes minutissima	9.53	43	409.79
3	Navicula cincta var. rostrata	5.62	66	370.92
4	Nitzschia frustulum	4.23	69	291.87
5	N. f. var. subsalina	4.02	54	217.08
6	Navicula tenelloides	3.20	62	198.40
7	Surirella ovata	2.16	51	110.16
8	Amphora coffeiformis	3.79	29	109.91
9	Diatoma tenue var. elongatum	2.82	38	107.16
10	Nitzschia acicularis	2.15	48	103.20
11	Cyclotella meneghiniana	2.13	46	97.98
12	Synedra famelica	2.77	34	94.18
13	Navicula cryptocephala	1.29	62	79.98
14	N. c. var. veneta	1.49	52	77.48
15	Nitzschia dissipata	1.91	39	74.49
16	Navicula secreta var. apiculata	1.38	49	67.62
17	Cymbella minuta	1.78	37	65.86
18	Nitzschia communis	1.52	43	65.36

Table 4. Mean and range of TDS values and simple correlation coefficients (r_{SC}) for 25 common diatom taxa from waters subject to saline seep in eastern Montana.

Taxon	n	Mean	Range	r_{SC}
Nitzschia dissipata (Nd)	31	922	436 - 2596	-0.020
Cymbella minuta (Cmi)	30	1286	368 - 6410	0.039
Navicula cryptocephala var. veneta (Ncv)	44	1598	436 - 7303	0.13[illegible]
Achnanthes minutissima (Am)	37	1711	368 - 6642	0.16[illegible]
Diatoma tenue var. elongatum (Dte)	34	1791	368 -14394	-0.083
Navicula cryptocephala (Nc)	54	1910	332 - 7244	0.174
N. secreta var. apiculata (Nsa)	42	2360	332 -12669	-0.151
Surirella ovata (So)	42	2427	332 - 8094	-0.107
Cyclotella meneghiniana (Cme)	41	2842	368 -16169	-0.179
Pleurosigma delicatulum (Pd)	24	3023	944 -12669	-----
Navicula peregrina (Npe)	23	3660	944 -16849	-----
Synedra famelica (Sfam)	33	3799	596 -14469	0.2[illegible]
Nitzschia frustulum var. subsalina (Nfs)	50	4124	478 -23819	-0.128
N. apiculata (Nap)	48	4305	368 -42519	-----
N. palea (Np)	82	4560	332 -42519	-0.137
N. acicularis (Nac)	45	4980	596 -42519	0.224
Entomoneis paludosa (Ep)	33	5002	684 -23819	-----
Navicula cincta var. rostrata (Ncr)	61	5119	332 -42519	0.214
Nitzschia frustulum (Nf)	63	5325	332 -42519	-0.022
Synedra fasciculata (Sfas)	26	5332	944 -42519	-----
Navicula pygmaea (Npy)	19	6434	844 -23819	-----
N. tenelloides (Nt)	57	6839	654 -42519	0.283
N. salinarum (Ns)	31	7240	746 -42519	-----
Nitzschia communis (Nco)	40	7530	866 -42519	0.147
Amphora coffeiformis (Ac)	23	11190	1311 -42519	0.224
ALL SAMPLES	91	5245	332 -42519	-----

Table 5. Halobion (salinity) spectrum modified from Kolbe (16) as reported by Lowe (17).

Freshwater (Oligohalobous) $<$ 500 mg/l TDS
- halophobous: does not tolerate small amounts of salt
- indifferent: tolerates small amounts of salt
- halophilous: stimulated by small amounts of salt

Brackish water (Mesohalobous) 500 - 30,000 mg/l TDS
- beta range: 500 - 10,000 mg/l TDS
- alpha range: 10,000 - 30,000 mg/l TDS

Marine (Euhalobous) 30,000 - 40,000 mg/l TDS

Extra-marine (Polyhalobous) $>$40,000 mg/l TDS

Euryhalinous (Euryhalobous): occurs over a broad range of salt concentrations, encompassing two or more large spectral designations.

Table 6. Reported salinity preferences for common diatom taxa from waters subject to saline seep in eastern Montana.

Taxon	Salinity Preference
Nitzschia dissipata	indifferent (17)
Cymbella minuta	indifferent (17), oligohalobous (24)
Navicula cryptocephala var. veneta	indifferent to mesohalobous (17)
	fresh to brackish water (23)
Achnanthes minutissima	indifferent (17)
	oligohalobous (23)
Diatoma tenue var. elongatum	halophilous (17)
	fresh to slightly brackish (23)
Navicula cryptocephala	indifferent (17)
	fresh to slightly brackish (23)
N. secreta var. apiculata	fresh water of high mineral content
Surirella ovata	indifferent (17)
Cyclotella meneghiniana	halophilous (17)
Pleurosigma delicatulum	fresh to brackish (23)
Navicula peregrina	meso halobous (17)
	brackish (23)
Synedra famelica	high mineral content (23)
Nitzschia frustulum var. subsalina	weakly saline water (10)
N. apiculata	mesohalobous (17)
N. palea	indifferent (17)
N. acicularis	indifferent (17)
Entomoneis paludosa	mesohalobous (17)
	moderately high conductivity (24)
Navicula cincta var. rostrata	total hardness= 376 mg/l (27)
Nitzschia frustulum	halophilous to indifferent and euryhalobous (17)
Synedra fasciculata	high conductivity, slightly brackish
Navicula pygmaea	hard fresh to brackish (23)
N. tenelloides	aerophil (23)
N. salinarum	hard fresh to brackish (23)
Nitzschia communis	indifferent (17)
Amphora coffeiformis	mesohalobous (17)
	high conductivity (24)

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Appendix A. Sample locations and dates.

Number	Site	Date
0016A	Big Spring Creek, N. of Lewistown, 15N.18E.5DA	9-12-74
0017A	Musselshell R., above Harlowton	9-13-74
*0018A	American Fk., E. of Harlowton on gravel rd., 07N.15E.5CB	9-13-74
0019A	Flatwillow Cr., @ FAS 500, 14N.30E.33CB	9-9-74
0020A	Judith R., @ Highway 87	10-16-74
0021A	Judith R., Headwaters near Utica, gravel rd. SE of Utica @ bridge, 14N.13E.28BBB	10-17-74
0022A	Arrow Cr. @ Highway 230, 19N.12E.13BA	10-16-74
0023A	Warm Spring Cr. @ Highway 235, 17N.17E.17AD	10-16-74
0024A	Cottonwood Cr. near Lewistown @ Highway 87, 15N.17E.22BA	10-16-74
0025A	Judith R., Middle Fk., S. of Utica 3 mi. 14N.12E.15BD	10-17-74
0037A	Judith R. at mouth near Highway 236, 23N.16E.25BA	11-7-74
0038A	Missouri R. @ PN Ferry, 23N.16E.25BA	11-7-74
0039A	Little Careless Cr. Gravel Rd. near Harlowton, Musselshell Basin, Wheatland Co., 10N.16E.09AA	11-8-74
0040A	Judith R. between Hobson & Utica (Hwy 239), Judith Basin Co. 14N.14E.10BA	11-7-74
0041A	Painted Robe Cr. SE of Lavina near mouth (1 mi. S., 5 mi. E.) Golden Valley Co. 23E.6N.15	11-21-74
0042A	Big Elk Cr., So. of Two Dot (1st farmhouse), Wheatland Co., 13E.8N.26	11-21-74
0043A	Musselshell R. @ Melstone	11-20-74
0109A	Wolf Cr. @ Denton	9-26-75
0110A	Judith R. @ Utica	9-26-75
*0111A	Seep 1 mi. W. of Judith in big mag, Fergus Co., 22N.16E.10CC	9-24-75
**0112A	Ackley Lake., SW of Hobson	9-26-75
0113A	Arrow Cr. @ Mouth, 15E.23N.	9-24-75
0114A	Sage Cr., Judith Basin Co., 16N14E.bcc	9-24-75
*0137A	Calf Cr. Highway 200 near Sand Springs	3-17-76
0138A	Cow Cr. @ Hwy 13 near Circle	3-16-76
0139A	Big Dry Cr. @ Hwy 200, Jordan	3-17-76
0140A	Redwater R. @ Circle	3-16-76
0141A	Yellowstone Co., N. of Acton near power line 03N.24E.11CC	4-9-76
*0142A	Yellowstone Co., 03N.24E.35BC	4-9-76
0143A	Teton R. N. of Ft. Benton on Hwy 233	4-23-76
0144A	Marias R. @ confluence w/ Teton R. @ Loma	4-23-76
0145A	Big Sandy Cr., 3 mi. E. of Big Sandy., S. off Hwy on gravel rd. ½ mi.	4-23-76
0146A	Milk R., 13 mi. E. of Havre @ Lohman under bridge	4-24-76
*0147A	Threemile Cr., So. of Harlem on Hwy 376	4-24-76
*0148A	Rylan Cr. @ 4 mi. Corner E. of Rapelje, 03N.20E.36AA.	4-21-76
0149A	Seep by Windmill E. of BN tracks, Stillwater Co., 02N.21E.11DD	4-21-76
0150A	Seep ½ mi. E. of farm buildings, Stillwater Co., 01N.21E.02BC	4-22-76
0151A	Luke Cr. behind Wilcox house, Stillwater Co., 03N.21E.18BD	4-21-76
*0152A	Hopex Cr. @ culvert, Stillwater Co., 01N.21E.10AB	4-22-76
0153A	Seep @ crossroads E. of Bottle Butte, Stillwater Co. 02N.21E.31BBB	4-22-76
0154A	Seep 9 mi. E. of farm buildings (sample No. 11), 01N.21E.08AA	4-22-76
*0155A	White Bear Cr. So. of Harlem on Hwy 376	4-24-76
0156A	Peoples Cr. @ Hwy 376 So. of Harlem	4-24-76
0157A	Missouri R. @ James Kipp State Rec. Area., U.S. 191	4-24-76
0159A	Small pond S. of Scobey in saline seep area	5-25-76
*0168A	Deer Cr. near Decker, Big Horn Co.	6-10-76
0169A	Lone Tree Cr., South Fk., Richland Co., 23N.57E.09DDD	6-15-76
*0170A	Tributary of E. Redwater Cr., Richland Co., 23N.53E.36BBC	6-15-76
*0171A	Hardscrabble Cr., Richland Co., 26N.55E.01DBB	6-15-76
0172A	Eagle Cr., Daniels Co., 35N.50E.27CBB	6-17-76
*0173A	Plentywood Cr. @ bridge, Sheridan Co., 35N.54E.16CDA	6-17-76
0174A	Redstone Cr. @ Hwy 5, Sheridan Co., 35N.52E.09BAD	6-17-76
0175A	Big Muddy Cr. @ road, Sheridan Co., 32N.55E.27BAA	6-16-76
*0176A	N. Fk. E. Redwater Cr., Richland Co., 24N.53E.25BBB	6-15-76
0177A	Antelope Cr., Sheridan Co., 34N. 56E.10DDD	6-16-76
*0178A	Charlie Cr., Richland Co., 26N.54E.15BBB	6-15-76
*0179A	Jeffrey Cr., Richland Co., 24N.53E.36BB	6-15-76
0180A	Seep 3 mi. E. of Culbertson, Roosevelt Co., 28N.56E.27ADD	6-16-76
0181A	First Hay Cr. @ bridge, Richland Co., 24N.58E.16DDB	6-15-76
0182A	Seep E. of Hwy 16, Richland Co., 25N. 58E.32DDD	6-17-76
*0183A	First Hay Cr., N. Fk., Richland Co., 25N.58E.31DDD	6-15-76
0184A	Little Muddy Cr., Roosevelt Co., 28N.59E.28DDC	6-16-76
0185A	Red Bank Cr., Roosevelt Co., 28N.59E.31AAC	6-16-76
0186A	Butte Cr. @ bridge, Daniels Co., 35N.47E.12ADD	6-17-76
0187A	Marron Cr., Sheridan Co., 35N.55E.21CDD	6-16-76
0188A	Sheep Cr. @ Hwy 16, Roosevelt Co., 30N.56E.30BBB	6-16-76
0189A	Lost Cr. @ Hwy 16, Roosevelt Co., 30N.56E.7BBB	6-16-76
0190A	ponds @ R.R. crossing (Bainville), Roosevelt Co., 28N.58E.20DDD	6-16-76
0191A	Sand Cr., Roosevelt Co., 30N.58E.14DCC	6-16-76
0192A	McCoy Cr. @ Hwy 5, Sheridan Co., 35N.54E.14BBC	6-17-76
0193A	Crail Cr., Yellowstone Co., 1N.23E.05DDD	6-24-76
0194A	No Name Cr., Yellowstone Co., 1N.23E.03DDD	6-24-76
*0195A	Stream seep, Yellowstone Co., 4N.25E.09CDC	6-25-76
0196A	"No. 21", Stillwater Co., 1N.23E.06DD	6-24-76
0197A	Cove Cr., Yellowstone Co., 1N.24E.15DCA	6-24-76
0198A	Creek, Yellowstone Co., 2N.24E.32CBB	6-24-76
*0199A	Small puddle, Yellowstone Co., 4N.25E.06CD	6-25-76

Reference Number	Site	Date
0200A	Carlo Cr., Stillwater Co., 1N.23E.06BC	6-24-76
0201A	N. Fk. Fivemile Cr., Yellowstone C., 2N.25E.19CAB	6-24-76
0202A	Chouteau Co., 24N.9E.36	8-5-76
*0203A	Chouteau Co., 21N.12E.34BDD	8-7-76
*0204A	Bird Coulee, Chouteau Co., 23N.8E.19BDD	8-8-76
*0205A	Crawford Ranch, Chouteau Co., 23N.6E.18	N.D.
0206A	Clear Cr., BlaineCo. Vercruyssen property, 31N.18E.20	7-8-76
0207A	Bullwhacker Coulee, Blaine Co., 26N.19E.35	7-8-76
**0208A	Reservoir, Blaine Co., 34N.21E.31C	7-9-76
*0209A	Saline seep area, Valley Co., 23N.37E.12DAA	7-26-76
0210A	Pond in seep area, Phillips Co., 27N.31E.28	7-23-76
0211A	Phillips Co., 24N.24E.22	7-25-76
0212A	Valley Co., 25N.36E.5BBD	7-27-76
0213A	Natural saline seep, Valley Co., 24N.38E.14ADD	7-26-76
0214A	Whitewater Cr. under bridge, Phillips Co., 36N.30E.9	7-21-76
0215A	Rock Cr., Valley Co., 35N.36E.33DC	7-27-76
0219A	Reservoir, Cascade Co., 19N.02W.08BD	6-25-76
*0220A	Pond, Teton Co., 23N.3W.33BBB	8-28-76
0221A	Fergus Co., 15N.22E.09S	9-10-76
0222A	Crown Butte Cr., Cascade Co., 20N.02W.25CA	8-27-76
0223A	Petroleum Co., 13N.26E.2CDC	9-13-76
0224A	Fergus Co., 19N.22E.05BBD	9-13-76
0225A	Cascade Co., 17N.02E.17C	8-28-76

* Waters containing genera of blue-green algae that include species suspected of producing strains toxic to livestock or wildlife.

**Waters containing a species of blue-green algae (*Aphanizomenon flos-aquae*) suspected of producing strains that are toxic to livestock or wildlife.

Appendix B. Genera of non-diatom algae found in the periphyton of surface waters suspected to be influenced by saline seep in eastern Montana.

Chlorophyta (green algae) 25 Genera
- Ankistrodesmus
- Bulbochaete
- Chara
- Chlamydomonas
- Chlorococcum
- Chlorogonium
- Cladophora
- Closterium
- Cosmarium
- Enteromorpha
- Gloeocystis
- Hormidium
- Mougeotia
- Oedogonium
- Pediastrum
- Planktosphaeria
- Platymonas
- Rhizoclonium
- Scenedesmus
- Schroederia
- Sphaerocystis
- Spirogyra
- Stigeoclonium
- Ulothrix
- Zygnema

Euglenophyta (euglenoid algae) 3 Genera
- Euglena
- Phacus
- Westella

Chrysophyta (golden-brown algae) 8 Genera
- Characiopsis
- Chrysochromulina
- Chrysococcus
- Diatoma
- Dinobryon
- Ochromonas
- Tribonema
- Vaucheria

Cyanophyta (blue-green algae) 19 Genera
- *Anabaena
- *Aphanizomenon
- Arthrospira
- Calothrix
- Chroococcus
- *Gomphosphaeria
- Heterohormogonium
- Hyella
- *Lyngbya
- Merismopedia
- *Nodularia
- *Nostoc
- Oscillatoria
- Phormidium
- Rivularia
- Spirulina
- Stichosiphon
- Synechocystis
- Tolypothrix

Rhodophyta (red algae) 1 Genus
- Audouinella

Cryptophyceae (algae of uncertain position) 1 Genus
- Rhodomonas

*Genera containing species of blue-green algae suspected of producing strains that are toxic to livestock or wildlife.

Appendix C. Percent relative abundance, percent frequency (occurrence), and abundance-occurence index for diatom taxa identified from surface waters suspected to be influenced by saline seep.

Taxon	Abundance (%)	Frequency (%)	Abundance-Occurrence (max.=10,000)
Achnanthes affinis	0.37	3	1.11
A. clevei	0.01	1	0.01
A. deflexa	0.14	8	1.12
A. flexella	t	2	----
A. hauckiana var. rostrata	0.01	2	0.02
A. lanceolata	0.24	24	5.76
A. lapponica var. ninckei	t	1	----
A. linearis	0.11	9	0.99
A. linearis f. curta	0.01	2	0.02
A. minutissima	9.53	43	409.79
A. sp.	0.05	5	0.25
Amphipleura pellucida	0.34	26	8.84
Amphora coffeiformis	3.79	29	109.91
A. ovalis	0.03	8	0.24
A. ovalis var. affinis	0.01	8	0.08
A. ovalis var. pediculus	0.38	19	7.22
A. veneta	0.42	14	5.88
A. sp.	t	1	----
Anomoeoneis costata	0.01	4	0.04
A. sphaerophora	t	2	----
A. vitrea	0.07	5	0.35
A. sp.	t	1	----
Asterionella formosa	0.01	3	0.03
Bacillaria paradoxa	0.05	5	0.25
Caloneis amphisbaena	0.01	10	0.10
C. bacillum	0.11	11	1.21
C. hyalina	0.05	1	0.05
C. ventricosa var. alpina	t	1	----
C. ventricosa var. minuta	t	2	----
C. ventricosa var. truncatula	0.07	7	0.49
C. sp.	0.02	3	0.06
Chaetoceros elmorei	0.21	2	0.42
Cocconeis pediculus	2.19	19	41.61
C. placentula	0.65	29	18.85
C. placentula var. euglypta	1.09	13	14.17
C. placentula var. lineata	0.03	4	0.12
Cyclotella glomerata	0.01	3	0.03
C. kutzingiana	0.28	6	1.68
C. meneghiniana	2.13	46	97.98
C. sp.	0.01	3	0.03
Cylindrotheca gracilis	0.12	15	1.80
Cymatopleura solea	0.01	13	0.13
Cymbella affinis	0.80	22	17.60
C. amphicephala	0.01	5	0.05
C. cistula	0.01	9	0.09
C. cymbiformis var. nonpunctata	t	1	----
C. delicatula	0.22	5	1.10
Cymbella lunata	0.01	3	0.03
C. mexicana	0.01	5	0.05
C. microcephala	1.32	23	30.36
C. minuta	1.78	37	65.86
C. muelleri	0.01	2	0.02
C. parva	0.03	2	0.06
C. prostrata	0.01	4	0.04
C. pusilla	0.74	20	14.80
C. rupicola	0.03	3	0.09
C. sinuata	0.16	10	1.60
C. triangulum	0.01	1	0.01
C. tumida	t	2	----
C. sp.	0.01	3	0.03
Denticula elegans	0.07	7	0.49
D. subtilis	0.01	8	0.08
D. sp.	0.05	12	0.60
Diatoma tenue	t	1	----
D. tenue var. elongatum	2.82	38	107.16
D. vulgare	0.34	22	7.48
D. vulgare var. breve	0.01	2	0.02
D. vulgare var. mesodon	t	1	----
D. sp.	0.01	1	0.01
Diploneis elliptica	0.03	1	0.03
D. puella	0.07	8	0.56
D. sp.	0.02	6	0.12
Entomoneis ornata	0.17	17	2.89
E. paludosa	0.67	34	22.78
E. robusta	t	1	----
E. sp.	t	4	----
Epithemia adnata var. saxonica	0.09	3	0.27
E. argus	0.01	1	0.01
E. sorex	1.13	11	12.43
E. turgida	0.03	9	0.27
E. sp.	0.03	7	0.21
Eunotia curvata	t	2	----
Fragilaria brevistriata var. inflata	t	1	----
F. brevistriata var. ?	t	1	----
F. capucina	0.05	2	0.10
F. capucina var. mesolepta	1.16	2	2.32
F. construens	0.03	6	0.18
F. construens var. subsalina	0.01	1	0.01
F. construens var. venter	0.03	8	0.24
F. crotonensis	0.18	6	1.08
F. leptostauron	t	1	----
F. vaucheriae	1.01	33	33.33
F. sp.	0.11	7	0.77
Gomphoneis herculeana	0.01	1	0.01
Gomphonema acuminatum	0.01	2	0.02
Gomphonema acuminatum var. ?	t	1	----
G. affine	0.02	3	0.06
G. angustatum	0.32	26	8.32
G. angustatum var. productum	0.02	1	0.02
G. angustatum var. ?	t	1	----
G. bohemicum	0.07	6	0.42
G. connector	0.01	1	0.01
G. dichotomum	0.03	4	0.12
G. gracile	t	1	----
G. intricatum	0.09	12	1.08
G. olivaceum	1.47	23	33.81
G. olivaceum var. calcarea	0.05	7	0.35
G. parvulum	0.49	39	19.11
G. tergestinum	0.01	1	0.01
G. truncatum	0.01	4	0.04
G. sp.	0.02	10	0.20
Gyrosigma acuminatum	0.01	5	0.05
G. attenuatum	0.01	1	0.01
G. exilis	0.01	1	0.01
G. peisonis	0.21	17	3.57
G. spencerii	0.05	16	0.80
G. spencerii var. curvula	0.01	2	0.02
G. sp.	0.01	7	0.07
Hantzschia amphioxys	0.07	23	1.61
H. amphioxys var. major	t	1	----
Mastogloia elliptica var. dansei	0.01	5	0.05
M. smithii	0.17	2	0.34
M. smithii var. lacustris	t	2	----
M. sp.	0.01	4	0.04
Melosira granulata var. angustissima	t	2	----
M. varians	t	4	----
M. sp.	0.03	3	0.09
Meridion circulare	0.02	7	0.14
Navicula accomoda	0.09	8	0.72
N. arvensis	0.06	7	0.42
N. atomus	0.72	18	12.96
N. auriculata	0.01	1	0.01
N. bicomica	t	1	----
N. capitata	0.01	2	0.02
N. capitata var. hungarica	0.13	14	1.82
N. cincta	0.66	15	9.90
N. cincta var. heufleri	t	1	----
N. cincta var. rostrata	5.62	66	370.92
N. circumtexta	0.05	12	0.60
N. cryptocephala	1.29	62	79.98
N. cryptocephala f. terrestris	0.16	1	0.16
N. cryptocephala var. exilis	t	2	----
N. cryptocephala var. veneta	1.49	52	77.48
N. cryptocephala var. ?	0.16	3	0.48
Navicula cuspidata	0.02	14	0.28
N. cuspidata var. obtusa	0.01	1	0.01
N. gottlandica	0.01	2	0.02
N. graciloides	0.07	14	0.98
N. halophila	0.02	7	0.14
N. halophila var. tenuirostris	0.01	2	0.02
N. heufleri	0.05	7	0.35
N. heufleri var. leptocephala	0.18	15	2.70
N. integra	t	1	----
N. jaagii	0.16	18	2.88
N. laevissima	0.02	5	0.10
N. lanceolata	0.01	6	0.06
N. menisculus var. upsaliensis	0.03	1	0.03
N. minima	0.01	2	0.02
N. minnewaukonensis	0.03	2	0.06
N. minuscula	0.03	3	0.09
N. mutica	0.03	11	0.33
N. mutica var. undulata	0.01	5	0.05
N. mutica var. ?	0.01	2	0.02
N. oblonga	0.01	2	0.02
N. odiosa	0.01	2	0.02
N. pelliculosa	0.01	1	0.01
N. peregrina	0.05	24	1.20
N. protracta	0.04	1	0.04
N. pupula	0.01	7	0.07
N. pupula var. capitata	t	1	----
N. pygmaea	0.56	20	11.20
N. radiosa	0.01	7	0.07
N. radiosa var. parva	0.03	8	0.24
N. rhynchocephala	0.34	4	1.36
N. rhynchocephala var. germainii	0.26	2	0.52
N. salinarum	1.22	33	40.26
N. salinarum var. intermedia	t	1	----
N. secreta var. apiculata	1.38	49	67.62
N. simplex	0.22	8	1.76
N. symmetrica	0.01	2	0.02
N. tanelloides	3.20	62	198.40
N. tenera	t	2	----
N. tripunctata	0.83	38	31.54
N. tripunctata var. schizonemoides	0.01	2	0.02
N. ventralis var. chilensis	t	1	----
N. viridula	0.01	5	0.05
N. viridula var. avenacea	0.82	13	10.66
N. viridula var. rostellata	0.03	4	0.12
N. sp.	0.74	46	34.04
Neidium affine var. amphirhynchus	0.01	2	0.02
N. binode	0.01	1	0.01
N. bisulcatum	0.01	1	0.01
N. sp.	t	2	----

t = trace

Appendix G. (Continued)

Taxon	Abundance (%)	Frequency (%)	Abundance-Occurrence (max.-10,000)
Nitzschia acicularis	2.15	48	103.20
N. acuta	0.04	5	0.20
N. amphibia	0.18	20	3.60
N. angustata	t	1	----
N. angustata var. acuta	0.01	2	0.02
N. apiculata	0.43	54	23.22
N. bulnheimiana	0.02	1	0.02
N. capitellata	0.05	5	0.25
N. clausii	0.03	3	0.09
N. closterium	t	1	----
N. communis	1.52	43	65.36
N. denticula	0.01	3	0.03
N. dissipata	1.91	39	74.49
N. epiphytica	0.08	8	0.64
N. epithemioides	t	1	----
N. fasciculata	t	3	----
N. filiformis	0.32	14	4.48
N. fonticola	0.07	8	0.56
N. frustulum	4.23	69	291.87
N. frustulum var. subsalina	4.02	54	217.08
N. frustulum var. ?	t	1	----
N. gandersheimiensis	t	1	----
N. gracilis	0.85	30	25.50
N. hantzschiana	0.01	2	0.02
N. hungarica	0.13	30	3.90
N. ignorata	0.60	3	1.80
N. kutzingiana	0.33	8	2.64
N. linearis	0.12	18	2.16
N. longissima var. reversa	0.56	16	8.96
N. lorenziana	0.01	1	0.01
N. lorenziana var. subtilis	0.01	2	0.02
N. microcephala	0.12	12	1.44
N. obtusa	0.09	6	0.54
N. ovalis	0.95	32	30.40
N. palea	6.75	90	607.50
N. paleacea	0.90	28	25.20
N. recta	0.07	12	0.84
N. romana	0.07	15	1.05
N. sigma	0.07	14	0.98
N. sigmoidea	0.03	16	0.48
N. stagnorum	t	3	----
N. sublinearis	0.04	3	0.12
N. tryblionella	0.01	9	0.09
N. tryblionella var. debilis	0.03	4	0.12
N. tryblionella var. levidensis	t	1	----
N. tryblionella var. victoriae	t	1	----
N. tryblionella var. ?	t	1	----
N. valdestriata	0.03	2	0.06
N. vermicularis	0.01	2	0.02
Nitzschia vitrea	t	3	----
N. vitrea var. salinarium	0.06	12	0.72
N. vivax	t	1	----
N. vivax var. ?	0.01	1	0.01
N. sp.	0.09	17	1.53
Pinnularia borealis	0.01	5	0.05
P. leptosoma	t	1	----
P. solaris	0.01	8	0.08
P. viridis	t	1	----
P. sp.	0.03	9	0.27
Pleurosigma delicatulum	0.26	24	6.24
P. sp.	t	1	----
Rhoicosphenia curvata	1.03	33	33.99
Rhopalodia gibba	0.11	28	3.08
R. gibba var. ventricosa	0.01	2	0.02
R. gibberula	0.01	3	0.03
R. musculus	0.05	11	0.55
Stauroneis smithii	0.01	2	0.02
Stephanodiscus astraea	t	1	----
S. dubius	0.01	1	0.01
S. minutus	0.62	17	10.54
Surirella angustata	0.09	14	1.26
S. biseriata var. bifrons	t	1	----
S. brightwellii	0.19	2	0.38
S. iowensis	0.03	13	0.39
S. ovalis	0.01	5	0.05
S. ovata	2.16	51	110.16
S. ovata var. pinnata	0.01	4	0.04
S. spiralis	0.01	5	0.05
S. striatula	t	3	----
Synedra acus	0.07	8	0.56
S. affinis	t	1	----
S. delicatissima	t	3	----
S. famelica	2.77	34	94.18
S. famelica var. ?	1.02	1	1.02
S. fasciculata	0.94	30	28.20
S. fasciculata var. ?	0.28	1	0.28
S. minuscula	0.49	4	1.96
S. parasitica	t	1	----
S. pulchella	0.13	8	1.04
S. pulchella var. lacerata	t	1	----
S. radians	0.07	10	0.70
S. rumpens	0.49	9	4.41
S. ulna	1.22	33	40.26
S. ulna var. amphirhynchus	t	1	----
S. ulna var. contracta	0.06	7	0.42
S. ulna var danica	0.01	1	0.01
S. sp.	0.03	6	0.18
Thalassiosira fluviatilis	0.49	15	7.35

t = trace

Appendix D. Margalef diversity (D), Shannon diversity (SD), total dissolved solids (TDS), and specific conductance (SC) at the 100 sites sampled.

Sample No.	D	SD	TDS	SC
0016A	4.94	.842	478	600
0017A	4.46	.845	983	1197
0018A	5.91	.885	368	502
0019A	6.17	.886	2596	3006
0020A	5.18	.869	451	552
0021A	2.79	.806	421	536
0022A	5.51	.866	1722	1910
0023A	3.86	.812	693	1071
0024A	4.04	.729	457	559
0025A	2.59	.831	420	529
0037A	3.91	.882	800	989
0038A	5.17	.884	691	864
0039A	5.37	.876	628	706
0040A	5.16	.854	450	560
0041A	3.59	.648	4672	5270
0042A	5.76	.862	615	760
0043A	—	—	1758	2158
0109A	4.24	.707	1718*	2092*
0110A	2.59	.559	458	578
0111A	2.26	.719	14469+	17000#
0112A	4.78	.748	—	—
0113A	0.50	.020	3210*	3390*
0114A	2.41	.738	16169+	19000#
0137A	—	—	1031*	1190
0138A	3.53	.739	874	1190
0139A	2.90	.726	1100+	1272
0140A	2.48	.709	2097+	2445
0141A	3.61	.795	3452	4184
0142A	1.46	.262	2914	3486
0143A	3.62	.678	654*	795*
0144A	3.65	.812	467*	579*
0145A	3.26	.840	699+	800*
0146A	2.12	.557	436+	490*
0147A	4.87	.814	—	—
0148A	3.94	.818	12669	12000
0149A	2.23	.786	7244+	8500
0150A	2.09	.677	7789	8800
0151A	1.28	.536	18407	23000
0152A	3.06	.848	2999	3347
0153A	3.37	.862	14394	13500
0154A	2.65	.725	7303	7770
0155A	4.40	.849	—	—
0156A	3.60	.870	784+	900*
0157A	3.97	.722	596+	679*
0159A	2.68	.793	3106	3550
0168A	5.56	.892	5075*	5380*
0169A	4.16	.856	1201+	1391
0170A	3.30	.619	7400	8210
0171A	5.12	.900	3206+	3749
0172A	3.93	.807	866	1107
0173A	5.51	.880	853	1704
0174A	4.68	.902	1942	2315
0175A	6.65	.884	684	846
0176A	4.30	.891	3630	4469
0177A	—	—	306	452
0178A	4.55	.870	4534	5017
0179A	1.28	.741	7346	8220
0180A	4.88	.863	755	963
0181A	5.64	.902	844	1116
0182A	1.91	.700	6798	7390
0183A	4.42	.896	2343	2733
0184A	4.54	.788	1152	1380
0185A	4.57	.846	2253	2407
0186A	7.26	.872	912	1160
0187A	5.46	.915	746	956
0188A	6.34	.901	899	1186
0189A	1.89	.350	6410*	5910*
0190A	1.65	.268	2148	2297
0191A	4.98	.894	1166	1417
0192A	6.71	.886	944+	1088
0193A	5.44	.890	3454	4247
0194A	5.15	.915	3613	4507
0195A	3.50	.828	—	—
0196A	2.24	.694	1314	1736
0197A	3.15	.690	3028	3628
0198A	2.31	.762	1401	1989
0199A	3.70	.871	5041	5760
0200A	4.02	.865	1262	1627
0201A	2.33	.481	6642	7290
0202A	3.19	.665	5119+	6000#
0203A	1.29	.515	12769+	15000#
0204A	1.64	.342	6394+	7500#
0205A	1.46	.601	—	—
0206A	6.13	.936	—	—
0207A	2.90	.768	7074+	8300#
0208A	4.53	.766	332+	368#
0209A	3.05	.724	23819+	28000#
0210A	2.54	.588	3343+	3910#
0211A	1.04	.644	6394+	7500#
0212A	2.91	.589	8094+	9500#
0213A	4.13	.818	10644+	12500#
0214A	6.69	.906	1311+	1520#
0215A	7.24	.910	1031+	1190#
0219A	0.84	.516	42519+	50000#
0220A	1.07	.430	14469+	17000#
0221A	3.19	.774	42519+	50000#
0222A	1.47	.716	16849+	19800#
0223A	2.12	.780	28154+	33100#
0224A	2.55	.787	11069+	13000#
0225A	2.55	.771	5119+	6000#

*Water sample taken on a different date than algae sample, either at the same site or a nearby site on the same water.

#Field conductivity measurement.

+TDS estimated from SC based on the regression equation X = 0.85Y + 19, where X is TDS and Y is SC.